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BIBLIOGRAPHY OF RESEARCH IN PLANT TRANSPIRATION

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SUPPLEMENT NUMBER 1
to
³ANNUAL REPORT
of
RESEARCH IN PLANT TRANSPIRATION, + 3a
⁴
DA Task 3A99-27-005-08

by
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BIBLIOGRAPHY ON PLANT TRANSPIRATION

This bibliography was prepared in connection with a research project on plant transpiration being conducted under DA Task 3A99-27-005-08. A report of the research has been published previously.* The following comprehensive list was obtained from literature citations in recent publications from the Botany Subject Index of the Plant Science Catalog compiled by the U. S. Department of Agriculture Library; from recent review articles that have appeared in Volumes III and IV of the Encyclopedia of Plant Physiology, W. Ruhland, Editor; and from Volume II of Plant Physiology, A Treatise, F. C. Steward, Editor. This bibliography is presented in the belief that it will be of value to others who are interested in the problems of plant transpiration and its effects on atmospheric processes.

* Annual Report of Research in Plant Transpiration, published as USAEPG-SIG Technical Report 6-42-61, 1961.

BIBLIOGRAPHY

1. Abd el Rahman, A. A., et al. Growth and transpiration of tomato in relation to night temperature under controlled conditions. Mededelingen Landbouwhogeschool, Wageningen, Nederland, 59. 1959
2. _____, and J. F. Bierhuizen. The effect of temperature and water supply on growth, transpiration, and water requirements of tomato under controlled conditions. Mededelingen Landbouwhogeschool, Wageningen, Nederland, 59. 1959
3. Abou Raya, M. A. The rate of water loss from stripped leaves. Jour. Exptl. Bot. 1:322-328. 1950
4. Agamov, S. Ueber die cuticulare transpiration. Izv. Glavn. Bot. Sada SSSR (Bul. Jard. Bot. Prin. URSS) 26:576-594. 1927
5. Ahmad, R. The role of transpiration in the absorption and translocation of mineral ions in plants as measured with radioactive calcium and phosphorus. Diss. Abs. 20(6):1989. Dec. 1959
6. Aleksandrov, V. G. Sur l'intensité de la transpiration quelques plantes herbacées. Scient. Papers Appl. Sect. Tifl. Bot. Gard. 4:1-28. 1925
7. Aleksandrov, W. G. Ueber die produktivität der transpiration. Trudy Tifl. Bot. Sada. (Trav. Jard. Bot. Tiflis) s. 2, no. 2. 56 p. 1920
8. Alekseev, A. M., and N. A. Gusev. The effect of the condition of the water in the leaves on the transpiration process. Dokl. Akad. Nauk SSSR. 71:757-760. 1950
9. Alexandrov, W. G. Über die transpirationsintensitat der pflanzen. Ber. Deutsche Bot. Ges. 45:67-82. 1927
10. Allerup, S. Transpiration and water movement in young wheat plants. Physiol. Plantarum 12(4):907-916. 1959
11. Allmendinger, D. F., and A. L. Kenworthy and E. L. Overholser. The carbon dioxide intake of apple leaves as affected by reducing the available soil water to different levels. Proc. Amer. Soc. Hort. Sci. 42:133-140. 1943
12. Alvim, P. de T. A atividade e fotossintética das células guardas. Lilloa 19:5-10. 1949
13. Alvim, P. de T. Estudos sobre o mecanismo do movimento dos estômatos. Lilloa 19:11-24. 1949

The first part of the paper is devoted to a general discussion of the problem. It is shown that the problem is of great importance in the theory of differential equations. The second part is devoted to the study of the properties of the solutions of the equation. It is shown that the solutions of the equation are unique and that they depend continuously on the initial conditions. The third part is devoted to the study of the asymptotic properties of the solutions. It is shown that the solutions of the equation tend to zero as $t \rightarrow \infty$. The fourth part is devoted to the study of the stability of the solutions. It is shown that the solutions of the equation are stable. The fifth part is devoted to the study of the periodic properties of the solutions. It is shown that the solutions of the equation are periodic. The sixth part is devoted to the study of the ergodic properties of the solutions. It is shown that the solutions of the equation are ergodic. The seventh part is devoted to the study of the mixing properties of the solutions. It is shown that the solutions of the equation are mixing. The eighth part is devoted to the study of the entropy properties of the solutions. It is shown that the solutions of the equation have a positive entropy. The ninth part is devoted to the study of the topological properties of the solutions. It is shown that the solutions of the equation are topologically transitive. The tenth part is devoted to the study of the dynamical properties of the solutions. It is shown that the solutions of the equation are dynamical systems.

14. Alvim, P. de T. Um aparelho simples para registrar a transpiração das plantas. Lilloa 19:25-28. 1949
15. _____. Studies on the mechanism of stomatal behavior. Amer. Jour. Bot. 36:781-791. 1949
16. _____. The influence of the green mesophyll in stomatal movement. Plant Physiol. 27:206-209. 1952
17. _____, and J. R. Havis. An improved infiltration series for studying stomatal opening as illustrated with coffee. Plant Physiol. 29:97-98. 1954
18. Amer, F. A. Stomatal behaviour in alkaline solutions. Physiol. Plantarum 7:650-656. 1954
19. _____, and W. T. Williams. Drought-resistance in Pelargonium zonale. Annals of Bot. N. S. 22:369-379. 1958
20. Amlong, H. U. Ueber den einfluss der hormonisierung auf die transpiration der pflanze. Naturwissenschaften 31(3/4):44-45. 1943
21. Anderson, A. P. On a new registering balance. Minn. Bot. Studies. 1:177-180. 1894
22. _____. Stomata on the bud scales of Abies pectinata. Botan. Gaz. 24:294-294. 1897
23. Anderson, D. B. Influence of CuSO_4 dusts upon the transpiration rate of peanuts and other plants. N. C. Sta. Ann. Rept., 53:110. 1931
24. Andersson, N. E., C. H. Hertz, and H. Rufelt. A new fast recording hygrometer for plant transpiration measurements. Physiol. Plantarum, 7:753-767. 1954
25. Andrews, F. Stomata of Trillium novale. Proc. Ind. Acad. Sci., 1914:209-211. 1918
26. Arcichovskij, V., and A. Ossipov. Die saugkraft der baumartigen pflanzen der zentralasiatischen wüsten nebst transpirationsmessungen an saxaul (Arthrophytum haloxylon Litw.) Planta, 14:552-565. 1931
27. Arends, J. Über den einfluss chemischer agenzien auf stärkegehalt und osmotischen wert der spaltöffnungsschliesszellen. Planta, 1:84. 1925
28. _____. Über den einfluss chemischer agenzien auf stärkegehalt und osmotischen wert der spaltöffnungsschliesszellen. Planta, 1:84-115. 1926

1. The first part of the report is devoted to a general survey of the situation in the country.

2. The second part of the report is devoted to a detailed analysis of the economic situation.

3. The third part of the report is devoted to a detailed analysis of the social situation.

4. The fourth part of the report is devoted to a detailed analysis of the political situation.

5. The fifth part of the report is devoted to a detailed analysis of the cultural situation.

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8. The eighth part of the report is devoted to a detailed analysis of the future prospects.

9. The ninth part of the report is devoted to a detailed analysis of the conclusions.

10. The tenth part of the report is devoted to a detailed analysis of the recommendations.

11. The eleventh part of the report is devoted to a detailed analysis of the annexes.

12. The twelfth part of the report is devoted to a detailed analysis of the bibliography.

13. The thirteenth part of the report is devoted to a detailed analysis of the index.

14. The fourteenth part of the report is devoted to a detailed analysis of the appendices.

15. The fifteenth part of the report is devoted to a detailed analysis of the conclusions.

16. The sixteenth part of the report is devoted to a detailed analysis of the recommendations.

29. Arens, K. Die kutikuläre exkretion des laubblattes. Jahrbuch wiss. Bot., 80:248-300. 1934
30. Arland, A. Das problem des wasserhaushaltes bei landwirtschaftlichen kulturpflanzen in kritisch-experimenteller Betrachtung, I. Wiss. Arch. Landwirtsch. Abt. A. Pflanzenbau, 1:1-160. 1929
31. _____. Das problem des wasserhaushaltes bei landwirtschaftlichen kulturpflanzen in kritisch-experimenteller Betrachtung, II. Wiss. Arch. Landwirtsch. Abt. A. Pflanzenbau, 2:423-433. 1929
32. _____. Zur methodik der transpirationsbestimmung am standort. Ber. Deut. Bot. Ges., 47:474-479. 1929
33. _____. Krankheitsbefall, anfälligkeit, pflanzenernuntereinander und zur transpiration. Wiss. Arch. Landwirtsch. Abt. A. Pflanzenbau, 7:79-125. 1931
34. _____. Anfälligkeit, ernährung und winterfestigkeit in ihren beziehungen untereinander und zur transpiration. Pflanzenbau, 8:218-223. 1932
35. _____. Die beurteilung des düngerbedürfnisses des bodens nach dem transpirationsvermögen der pflanzen. Vorläufige mitteilung. Ernähr. Pflanze, 28:377-381. 1932
36. _____. Die transpirationsintensität der pflanzen als grundlage bei der ermittlung optimaler acker- und pflanzenbaulicher kulturmassnahmen. Abh. sächs. Akad. Wiss. Math.-naturwiss. Kl., 44:1-80. 1952
37. _____, and E. Rohlig. Ein beitrage zum problem der sortenberatung auf transpirations-physiologischer grundlage. Z. f. Acker-u. Pflanzenbau 108(1/2):20-30. 1959
38. _____, and R. Zwicker. Anwelktranspiration und hydratur verschieden mit kalium ernährter haferpflanzen unter besonderer berücksichtigung des jahresrhythmus. Z. f. Acker-u. Pflanzenbau, 108(4):449-472. 1959
39. Army, T. J., and T. T. Kozlowski. Availability of soil moisture for active absorption in drying soil. Plant Physiol. 26:353-362. 1951
40. Arthur, J. M., and W. D. Stewart. Transpiration of tobacco plants in relation to radiant energy in the visible and infrared. Contr. Boyce Thompson Inst., 5:483-501. 1933

CONTENTS
ORIGINAL ARTICLES
The Medical Profession and the Public Health
The Medical Profession and the Public Health
The Medical Profession and the Public Health

ORIGINAL ARTICLES
The Medical Profession and the Public Health
The Medical Profession and the Public Health
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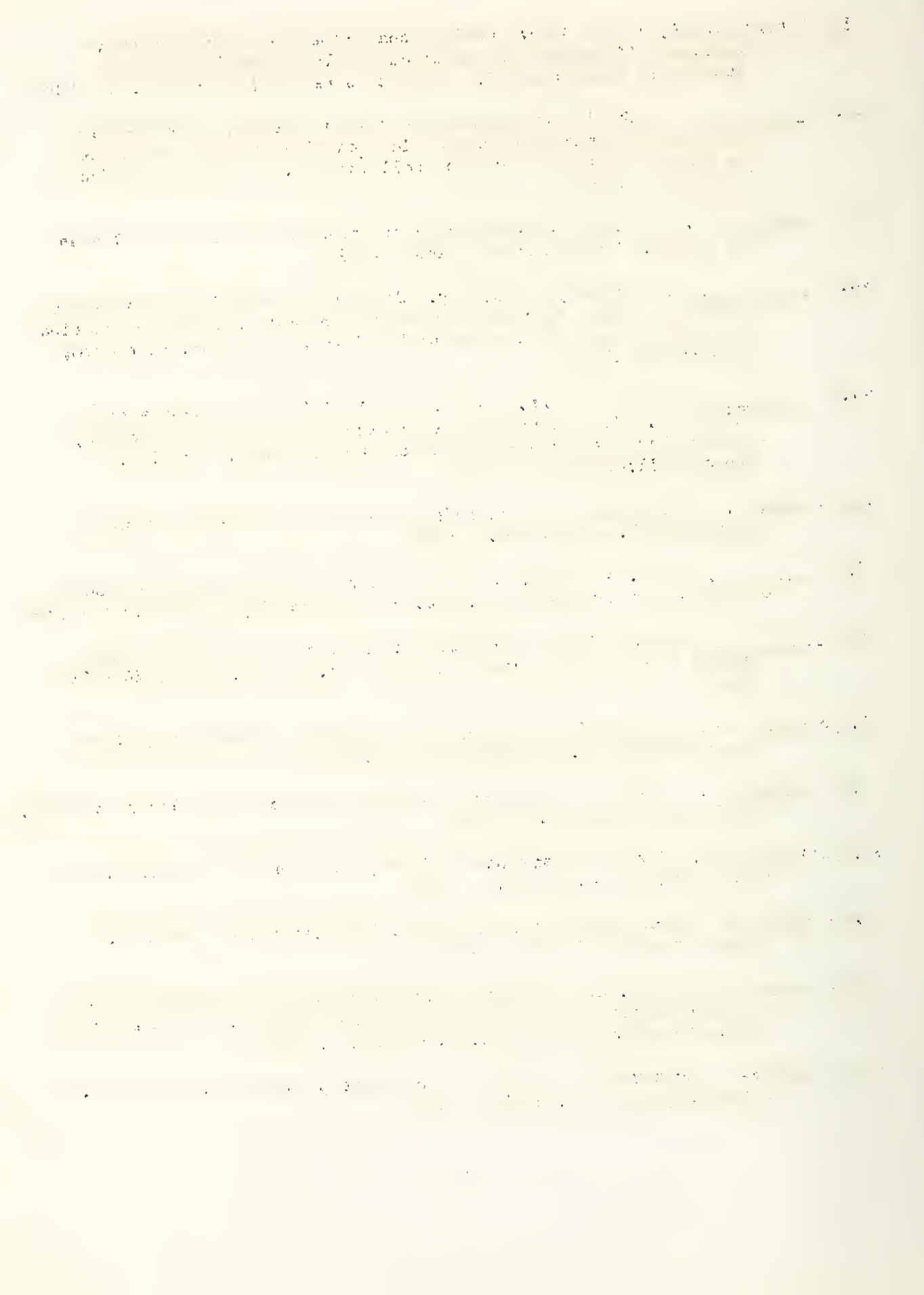
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The Medical Profession and the Public Health
The Medical Profession and the Public Health

ORIGINAL ARTICLES
The Medical Profession and the Public Health
The Medical Profession and the Public Health
The Medical Profession and the Public Health

41. Artsikhovskii, V. M. Kobal tovaia proba kak metod izucheniia transpiratsii (L'épreuve par papier au cobalt comme méthode pour étudier la transpiration). Sovetsk. Botanika (4/5):128-139. 1938
42. _____. Izuchenie transpiratsii vesovy m sposobem s pomoshch'iu kolloidal'nykh plenek (Étude de la transpiration par la méthode du pesage a l'aide de membrane colloïdales). Sovetsk. Botanika (2):39-49. 1939
43. Asana, R. D. On the inter-dependence of transpiration rates of leaves on a plant. Current Sci., 9:186. 1940
44. _____, A. D. Saini, and D. Ray. Studies in physiological analysis of yield. III. The rate of grain development in wheat in relation to photosynthetic surface and soil moisture. Physiol. Plantarum, 11:655-665. 1958
45. _____, and A. D. Saini. Studies in physiological analysis of yield. IV. The influence of soil drought in grain development, photosynthetic surface and water content of wheat. Physiol. Plantarum 11:666-674. 1958
46. Ashby, E. Comparison of two methods of measuring stomatal aperture. Plant Physiol., 6:715-719. 1931
47. _____, and L. B. Walsh. Etude sur la transpiration des feuilles diombre et de lumière. Bul. Boc. Bot. Geneve II, 23:466-475. 1931
48. _____, and R. Wolf. A critical examination of the gravimetric method of determining suction force. Ann. Bot. N. S., 11:261-268. 1947
49. Ashby, W. C. Methods for determining water loss. Chronica Botanica Co., Waltham, Mass. 17:Chapter 23. 1957
50. Askenasy, E. Über die temperatur, welche pflanzen in sonnenlicht annehmen. Bot. Ztg., 33:441-444. 1875
51. Aslyng, H. C. Water consumption in plant production. Encyclopedia of Plant Physiol., 3:685-695. 1956
52. Atumi, K. Some studies on the stomata of kaki leaves. Jour. Hort. Assoc. Japan 11:402-413. 1940
53. Audus, L. J., and A. H. Cheetham. Investigations on the significance of ethereal oils in regulating leaf temperatures and transpiration rates. Annals of Bot. N. S., 4:465-483. 1940
54. Aykin, S. Hygromorphic stomata in xeromorphic plants. Rev. Fac. Sci. Istanbul, Ser. B, 18:75-90. 1953



55. Bachmann, F. Gedanken zur transpirationsanalyse. *Planta*, 16:526-533. 1932
56. Bader, A. Vergleichende transpirationsuntersuchungen in der gattung Pinus. Tübingen, E. Göbel, 71 p. 1930
57. Bailey, L. F., J. S. Rothacher, and W. H. Cummings. A critical study of the cobalt chloride method of measuring transpiration. *Plant Physiol.* 27:553-574. 1952
58. Baker, H., and W. O. James. The behaviour of dyes in the transpiration stream of sycamores (Acer pseudo platanus L.) *New Phytol.*, 32: 245-260. 1933
59. Bakke, A. L. Studies on the transpiring power of plants as indicated by the method of standardized hygrometric paper. *Jour. Ecol.*, 2:145-173. 1914
60. _____. The index of foliar transpiring power as an indicator of permanent wilting in plants. *Bot. Gaz.*, 60:314-319. 1915
61. _____, and B. E. Livingston. Further studies on foliar transpiring power in plants. *Physiol. Res.*, 2:51-71. 1916
62. _____, and H. H. Plagge. The extent to which weeds modify the transpiration of cereals. *Iowa Agr. Expt. Sta. Res. Bul.* 96: 211-239. 1926
63. Bald, J. G. Stomatal droplets and the penetration of leaves by plant pathogens. *Amer. Jour. Bot.*, 39:97-99. 1952
64. Ballard, L. A. T. The effect of nitrate supply on transpiration ratio in plants. *Austral. Jour. Expt. Biol. and Med. Sci.*, 11:161-176. 1933
65. Bange, G. G. J. On the quantitative explanation of stomatal transpiration. *Acta Bot. Neerl.*, 2:255-297. 1953
66. Barbieri, N. A. Captation de l'eau de la transpiration invisible des plantes. *Bul. Mons. Soc. Nat. Hort. France*, 2:41-43. 1935
67. Barnes, C. R. The significance of transpiration. *Sci.*, 15:460. 1902
68. Barr, C. G. Photosynthesis in maize as influenced by a transpiration-reducing spray. *Plant Physiol.*, 20:86-97. 1945
69. Bartholomew, E. T. Certain phases of citrus leaf transpiration. *Amer. Jour. Bot.*, 18:765-783. 1931

$\frac{d}{dt} \left(\frac{\partial L}{\partial \dot{x}} \right) = \frac{\partial L}{\partial x}$

70. Bates, C. G. A new evaporimeter for use in forest studies. Month. Weather Rev., 47:283-294. 1919
71. Baumgartner, A. Thermoelektrische untersuchungen über die geschwindigkeit des transpirationsstromes. Zeitschr. Bot., 28: 81-136. 1934
72. Bayer, A. W. A field method for the transpiration rate of grasses. Ann. Natal Mus., 9:381-390. 1940
73. Beanland, L. Recherches sur les mouvements diurnes des stomates des feuilles d'Adenostyles alliariae Gouan. Bul. Soc. Bot. Genève II, 23:476-478. 1931
74. Beasley, E. W. Effects of some chemically inert dusts upon the transpiration rate of yellow coleus plants. Plant Physiol., 17: 101-108. 1942
75. Beideman, I. N. Opyt sostavleniia karty intensivnosti transpiratsii rastenii (Experiment in drawing a map of the intensity of plant transpiration). Bot. Zhur., 35:40-45. 1950
76. Beljakoff, E. Über den einfluss der temperatur auf die kohlendioxid-assimilation bei zwei klimatischen pflanzenrassen. Planta, 11:727-764. 1930
77. Bellani, A. Descrizione di un nuovo amidometro per servire di continuazione e fine alle riflessioni critiche intorno all' evaporazione. Gior. Fis. Chem., 3:166-177. 1820
78. Benocke, W. Die nebenzellen der spaltöffnungen. Bot. Zeit., 50:521-529, 537-546, 553-562, 569-578, 585-593, 601-607. 1892
79. Bergen, J. Y. The transpiration of Spartium junceum and other xerophytic shrubs. Bot. Gaz., 36:464-467. 1903
80. _____. Transpiration of sun leaves and shade leaves of Olea europaea and other broad-leaved evergreens. Bot. Gaz., 38:285-296. 1904
81. _____. Relative transpiration of old and new leaves of the Myrtus type. Bot. Gaz., 38:446-451. 1904
82. _____. The modifiability of transpiration in young seedlings. Bot. Gaz., 48:275-282. 1909
83. Berger-Landefeldt, U. Der wasserhaushalt der Alpenpflanzen. Bibl. Bot., H. 115. 1936

84. Berger-Landefeldt, U. Zum wasserverbrauch von pflanzenbeständen.
Forschgn u. Fortschr., 25:83-85. 1949
85. _____. Über den wasserverbrauch von pflanzenverbänden. Planta,
37:6-11. 1949
86. _____. Beiträge zur messung der evapotranspiration nach dem
austauschverfahren. Arch. Meteorol. Geophys. U. Bioklimatol.
Ser. B, 5:66-102. 1953
87. Bergman, H. F. Internal stomata in oricaceous and other unrelated
fruits. Bul. Torrey Bot. Club, 47:213-221. 1920
88. Bernbeck, O. Wind und pflanze. Flora, 117:293-300. 1924
89. Bessey, C. E. Some considerations upon the functions of the stomata.
Sci., N. S., 7:13-16. 1898
90. _____, and A. F. Woods. Transpiration, or the loss of water from
plants. Proc. Amer. Assoc. Adv. Sci., 40:305-308. 1892
91. Bews, J. W., and R. D. Aitken. Some experiments on the rate of water-
loss during the drying of leaves. Mem. Bot. Surv. So. Africa,
5:44-56. 1923
92. _____, and _____. The water requirement and transpiration
of a common Natal weed, Bidens pilosa (L.). Mem. Bot. Surv. So.
Africa, 8:41-65. 1925
93. Beyer, A. F. Über tropfenbildung in den schliesszellen der spalt-
öffnungen von Tradescantia zebrina. Bot. Arch., 26:224-256. 1929
94. Biale, J. B. Transpiration of lemon cuttings with reference to leaf-
root relationship. Proc. Amer. Soc. Hort. Sci., 36(1938):250-254.
1939
95. _____. Periodicity in transpiration of lemon cuttings under
constant environmental conditions. Proc. Amer. Soc. Hort. Sci.,
38:70-74. 1941
96. Bialoglowski, J. Effect of humidity on transpiration of rooted lemon
cuttings under controlled conditions. Proc. Amer. Soc. Hort. Sci.,
33:166-169. 1935
97. _____. Effect of extent and temperature of roots on transpiration
of rooted lemon cuttings. Proc. Amer. Soc. Hort. Sci., 34:96-102.
1936
98. Biebl, R. Freilandbeobachtungen an spaltöffnungen von Hydrocharis,
Nymphaea, and Nuphar. Zool. Bot. Gesell. Verhandl., 92:249-253.
1951

99. Bielorai, H., and D. Angus. Transpiration reduction by spraying with low viscosity silicones. Israel Res. Council B., 7D(2):105-106. 1959
100. Bierhuizen, J. F. Some observations on the relation between transpiration and soil moisture. Inst. for Land and Water Mgmt. Res. Tech. Bul. No. 4:94-98. 1959
101. _____, and P. J. C. Kuiper. Transpiration of plants under controlled conditions. Tech. Bul. No. 4. 1960
102. Blackman, F. F. Experimental researches on vegetable assimilation and respiration. III. On the paths of gaseous exchange between aerial leaves and the atmosphere. Phil. Trans. Roy. Soc., 186:503-562. 1895
103. _____, and G. L. C. Matthaei. Experimental reaches on vegetable assimilation and respiration. IV. A quantitative study of carbon dioxide assimilation and leaf temperature in natural illumination. Proc. Roy. Soc., B., 76:402-460. 1905
104. Blackman, V. H., and S. G. Paine. A recording transpirometer. Annals of Bot., 28:109-113. 1914
105. _____, and R. C. Knight. A method of controlling the rate of air movement in transpiration experiments. Annals of Bot., 31:217-220. 1917
106. Blaydes, G. W. A survey of rates of water loss from leaves. Ohio Jour. Sci., 28:99-118. 1928
107. _____. Water loss and stomatal investigations. Ph.D. Thesis, Ohio State Univ. 1932
108. _____. Water-vapor loss from plants growing in various habitats. Ohio Jour. Sci., 35:112-130. 1935
109. Bogen, H. J. Besprechung von Small u. Maxwell, pH phenomena in relation to stomatal opening. Zeit. Bot., 36:65. 1940
110. Böhm, J. Ueber die wasserbewegung in transspirirenden pflanzen. Landw. Vers. Stat. bd. 90:357-389. 1877
111. Böhning, R. H., and C. A. Burnside. The effect of light intensity on rate of apparent photosynthesis in leaves of sun and shade plants. Amer. Jour. Bot., 43:557-561. 1956
112. Bolas, B. D., and I. W. Selman. An inexpensive recording porometer. Annals of Bot., 49:803-807. 1935

113. Boon-Long, T. S. Transpiration as influenced by osmotic concentration and cell permeability. Amer. Jour. Bot., 28:333-343. 1941
114. Boonstra, A. E. H. R. Die bedeutung des Wurzeldrucks für erhöhte transpiration der erbsen bei höherer Wurzeltemperatur. Planta, 24:59-65. 1935
115. Boresch, K. Zur graphischen registrierung der transpiration von Blättern. Planta, 20:448-469. 1933
116. Borisiuk, N. A. Materialy k voprosu o transpiratsii plodovykh derev'ev (Materials relating to the transpiration of fruit trees). Trudy Mloevsk. Sadovo-Ogor. Opytn. Stan. (Bul. Mleyev Hort. Expt. Sta.) No. 41. 127 p. 1931
117. Bosian, G. Assimilations- und transpirationsbestimmungen an pflanzen des Zentralkaiserstuhls. Zeit. Bot., 26:209-294. 1933
118. _____. Über die Vollautomatisierung der CO₂-assimilationsbestimmung. Ber. Deut. Bot. Ges., 66:35-36. 1953
119. _____. Zum problem des Küvettenklimas: Temperatur und Feuchteregulierung. Ber. Deut. Bot. Ges., v. 72, no. 9:391-397. 1959
120. Bosman, F. H., and P. J. S. Coetzee. Transpiration as a factor in irrigation practice. Farming So. Africa, 10:381. 1935
121. Botticher, R., and L. Behling. Licht, transpiration, salzaufnahme und blattstruktur. Flora, 34:1-44. 1940
122. Bouyoucos, G. J. Transpiration of wheat seedlings as affected by soils, by solutions of different densities, and by various chemical compounds. Jour. Amer. Soc. Agron., 3:130-191. 1911
123. _____. Transpiration of wheat seedlings as affected by different densities of a complete nutrient solution in water, sand, and soil cultures. Beih. Bot. Zentralblatt, 29:1-20. 1912
124. Boysen-Jensen, P. Studies on transpiration in high-moor plants. Bot. Tidskr., 36:144-154. 1917
125. _____. Über neue apparate zur messung der kohlendäureassimilation, der respiration, der öffnungsweite der spaltöffnungen und der Beleuchtungsstärke. Planta, 6:456-472. 1928
126. _____. Die stoffproduktion der pflanzen. Jena, 1-108. 1932

127. Bradbury, D., and W. B. Ennis, Jr. Stomatal closure in kidney bean plants treated with ammonium 2,4-dichlorophenoxyacetate. *Amer. Jour. Bot.*, 39:324-328. 1952
128. Brauner, L. Eine neue automatische transpirationswaage. *Jahrb. wiss. Bot.*, 75:295-303. 1931
129. Braun-Blanquet, G., J. Braun-Blanquet, and H. Meier. Contribution à l'étude de la transpiration de quelques végétaux Méditerranéens. In *Bucharest Academia Republicii Populare Române. Omagiu lui Traian Savulescu cu prilejul implinirii a 70 de ani*, p. 61-65, Bucuresti. 1959
130. Breazeale, E. L., W. T. McGeorge, and J. F. Breazeale. Water absorption and transpiration by leaves. *Soil Sci.*, 72:239-244. 1951
131. Brewig, A. Ein beitrag zur analyse des transpirationswiderstandes. *Planta*, 20:734-791. 1933
132. _____. Beobachtungen über den einfluss der sprossaugung auf die stoffdurchlässigkeit der Wurzeln. *Ber. Deut. Bot. Ges.* 54:(80)-(85). 1936
133. Brierley, W. G. Transpiration rates in old and new canes of the Latham raspberry as measured by non-toxic dyes. *Proc. Amer. Soc. Hort. Sci.*, 27:152-157. 1930
134. _____. Transpiration in new and old canes of the Latham raspberry. *Proc. Amer. Soc. Hort. Sci.*, 28:188-193. 1931
135. Briggs, L. J., and H. L. Shantz. A wax seal method for determining the lower limit of available soil moisture. *Botan. Gaz.*, 51: 210-219. 1911
136. _____, and _____. The wilting coefficient and its indirect determination. *Botan. Gaz.*, 53:20-37. 1912
137. _____, and _____. The relative wilting coefficient for different plants. *Botan. Gaz.*, 53:229-235. 1912
138. _____, and _____. A balancing method for differentiating between absorption and transpiration. *Sci.*, 35:158. 1912
139. _____, and _____. The wilting coefficient for different plants and its indirect determination. *USDA Bur. Plant Ind. Bul.* 230. 1912
140. _____, and _____. An automatic transpiration scale of large capacity for use with freely exposed plants. *Jour. Agr. Res.*, 5:117-133. 1915

1. The first part of the document is a list of names and addresses, which are arranged in a columnar fashion. The names are written in a cursive script, and the addresses are written in a more formal, printed style. The list appears to be a directory or a roster of some kind.

2. The second part of the document is a series of short, handwritten notes or entries. These are written in a cursive script and are arranged in a columnar fashion, similar to the first part. The notes appear to be a continuation of the information in the first part, or perhaps a separate list of items.

3. The third part of the document is a series of short, handwritten notes or entries. These are written in a cursive script and are arranged in a columnar fashion, similar to the first part. The notes appear to be a continuation of the information in the first part, or perhaps a separate list of items.

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141. Briggs, L. J., and H. L. Shantz. Hourly transpiration rate on clear days as determined by cyclic environmental factors. Jour. Agr. Res., 5:583-651. 1916
142. _____, and _____. Daily transpiration during the normal growth period and its correlation with the weather. Jour. Agr. Res., 7:155-213. 1916
143. _____, and _____. Comparison of the hourly evaporation rate of atmometers and free water surfaces with the transpiration rate of Medicago sativa. Jour. Agr. Res., 9:277-293. 1917
144. Brouwer, R. Water absorption by the roots of Vicia faba at various transpiration strengths. I. Analysis of the uptake and the factors determining it. Koninkl. Ned. Akad. Wetenschap., Proc. Ser. C, 56:106-115. 1953
145. _____. The regulating influence of transpiration and suction tension on the water and salt uptake by the roots of intact Vicia faba plants. Acta. Botan. Neerl., 3:264-312. 1954
146. Brown, H. T. The principles of diffusion, their analogies and applications. Jour. Chem. Soc. Trans., 113:559-585. 1918
147. _____, and G. H. Morris. A contribution to the chemistry and physiology of foliage leaves. Jour. Chem. Soc. Trans., 63:604-677. 1893
148. _____, and F. Escombe. Static diffusion of gases and liquids in relation to the assimilation of carbon and translocation in plants. Phil. Trans. Roy. Soc. London B., 193:223-291. 1900
149. _____, and _____. Researches on some of the physiological processes of green leaves, with special reference to the interchange of energy between the leaf and its surroundings. Proc. Roy. Soc. London, Ser. B, 76:29-111. 1905
150. _____, and W. E. Wilson. On the thermal emissivity of a green leaf in still and moving air. Proc. Roy. Soc. London, Ser. B, 76:122-137. 1905
151. Brown, J. Subcortical formation and abnormal development of stomata in etiolated shoots of Opuntia blakeana. Botan. Gaz., 70:295-307. 1920
152. Brown, M. A. The influence of air currents on transpiration. Proc. Iowa Acad. Sci., 17:13-15. 1910
153. Brown, W. H. The relation of evaporation to water content of the soil at the time of wilting. Plant World, 15:121-134. 1912

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154. Brown, W. H. The relation between soil moisture content and the conditions of the aerial environment of plants at the time of wilting. Johns Hopkins Univ. Circ., 1912:130-138. 1912
155. Brueckner, A. M. Transpiration studies of some Natal midlands thornveld trees. So. African Jour. Sci., 41:186-193. 1945
156. Bruno, F. La fluttuazione diurna della traspirazione nel corso delle stagioni nel clima del Mediterraneo. Lavori R. Ist. Bot. Palermo, 6:1-91. 1935
157. Burger, H. Die transpiration unsever wald bäume. Zeitschr. Forst.- u. Jagda., 57:473-482. 1925
158. Burgerstein, A. Untersuchungen über die besienungen der nuhrstoffe sur transpiration der pflanzen. 1.-2. reihe. Sitsungab. K. Akad. Wien. Abt. I, 73:191-244. 1876
159. _____. Materialien zu einer monographie betreffend die erscheinung der transpiration der pflanzen. Bot. Ges. Wien, 37:691-782. 1887
160. _____. Die transpiration der pflanzen. Jena, 1920
161. _____. Änderungen der spaltöffnungsweite unter dem einfluss verschiedener Bedingungen. Verh. Zool. Bot. Ges. Wien. 113-131. 1920
162. _____. Die transpiration der pflanzen. Dritter Teil. Jena., 63 p. 1925
163. Burns, G. P. The relative transpiration of white pine seedlings. Plant World, 18:1-6, 1915.
164. Buscalioni, L., and G. Pollacci. L'applicazione delle pellicole di collodio allo studio di alcuni processi fisiologici delle piante ad in particolar modo pella traspirazione. Atti. Ist. Bot. Ecc. Pavia 2: 1901/02
165. _____, and _____. Alteriovi ricerche sull' applicazione delle pellicole di collodio allo studio di alcuni processi fisiologici dell piante ed in particolare modo delle traspirazione vegetale. Atti. Ist. Bot. Univ. Pavia, 7. 1902
166. Büttner, K. Bedeutung und messung der oberflächeufeucht fur die transpirationsanalyse. Biol. Zentrabl., 55:356-360. 1953

1. The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that proper record-keeping is essential for the transparency and accountability of the organization. This section also outlines the various methods used to collect and analyze data, ensuring that the information is reliable and up-to-date.

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3. The third part of the document addresses the human resources of the organization. It discusses the current state of the workforce, including the number of employees, their skills, and their experience. This section also outlines the various initiatives used to attract and retain top talent, such as training and development programs. The goal is to ensure that the organization has a strong and capable workforce that is able to meet the challenges of the future.

4. The fourth part of the document discusses the organization's relationship with its stakeholders. It identifies the various groups that have an interest in the organization, such as customers, suppliers, and the community. This section also outlines the various strategies used to engage these stakeholders and build strong relationships. The goal is to ensure that the organization is able to meet the needs of its stakeholders and maintain a positive reputation.

5. The fifth part of the document discusses the organization's overall strategy and vision. It outlines the organization's long-term goals and the various initiatives used to achieve these goals. This section also discusses the organization's commitment to social responsibility and the various initiatives used to promote sustainability. The goal is to ensure that the organization is able to achieve its long-term goals while also contributing to the well-being of society.

167. Calderón, G. F. Es la transpiración de las plantas terrestres un mal inevitable? Inst. de Defensa Café de Costa Rica. Rev. 14:454-458. 1944
168. Caldwell, J. S. The relation of environmental conditions to the phenomenon of permanent wilting in plants. *Physiol. Res.*, 1:1-56. 1913
169. Cameron, S. H. The influence of soil temperature on the rate of transpiration of young orange trees. *Proc. Amer. Soc. Hort. Sci.*, 38:75-79. 1941
170. Cannon, W. A. On the transpiration of Fouquieria splendens. *Bul. Torrey Bot. Club*, 32:397-414. 1905
171. _____. A new method of measuring the transpiration of plants in place. *Bul. Torrey Bot. Club*, 32:515-529. 1905
172. _____. The effects of high relative humidity on plants. *Torreya*, 6:21-25. 1906
173. Carlson, C. W., J. Alessi, and R. H. Mickelson. Evapotranspiration and yield of corn as influenced by moisture level, nitrogen fertilization and plant density. *Soil Sci. Soc. Amer. Proc.*, 23(3):242-245. 1959
174. Carroll, J. C., and F. A. Welton. Daily periodicity of stomata in certain species of turf grasses. *Botan. Gaz.*, 99:420-423. 1937
175. Cavanillas, R. L. Estudios sobre transpiración vegetal: experiencias con trigo cultivado en lisímetros. *Spain Inst. Espan. de Edafologia, Ecol. y Fisiol. Veg. An.*, 7:187-200. 1948 -- *An. 5:441-453.* 1946
176. _____, and D. A. Carpio. Estudios de transpiración vegetal. *Spain Inst. Espan. de Edafologia, Ecol. y Fisiol. Veg. An. 5:65-92.* 1946
177. _____, and _____. Estudio sobre transpiración vegetal. *Judias cultivadas lisímetros. An. de Edafologia y Fisiol. Veg.* 10:603-624. 1951
178. Cavarra, P., and R. B. Espino. Foliar transpiring power of different varieties of abaca grown at the College of Agriculture. *Philipp. Agr.*, 12:135-140. 1923
179. Chiao, C. Y. Stomatal frequency in relation to environmental conditions with special reference to humidity and soil moisture. *Bul. Chinese Bot. Soc.*, 3:27-43. 1937

1. The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that proper record-keeping is essential for the integrity of the financial system and for ensuring that all parties involved are held accountable for their actions.

2. The second part of the document outlines the specific procedures for recording transactions. It details the steps that must be followed to ensure that all information is captured accurately and that the records are easily accessible and auditable.

3. The third part of the document addresses the issue of data security. It discusses the various risks associated with data loss or theft and provides recommendations for how to protect sensitive information from unauthorized access.

4. The fourth part of the document discusses the importance of regular audits. It explains how audits can help to identify errors, detect fraud, and ensure that the system is operating as intended.

5. The fifth part of the document discusses the importance of training. It emphasizes that all personnel involved in the system must be properly trained to ensure that they are able to perform their duties accurately and efficiently.

6. The sixth part of the document discusses the importance of documentation. It explains that all procedures and policies must be clearly documented to ensure that they are consistent and can be easily followed.

7. The seventh part of the document discusses the importance of communication. It emphasizes that all parties involved in the system must be kept informed of any changes or updates to ensure that they are able to adapt to the new requirements.

8. The eighth part of the document discusses the importance of monitoring. It explains that the system must be monitored regularly to ensure that it is operating as intended and that any issues are identified and resolved as quickly as possible.

9. The ninth part of the document discusses the importance of evaluation. It explains that the system must be evaluated regularly to ensure that it is still meeting the needs of the organization and that any necessary changes are made.

10. The tenth part of the document discusses the importance of compliance. It emphasizes that the system must be designed and operated in a way that complies with all applicable laws and regulations.

180. Childers, N. F. Some effects of sprays on the growth and transpiration of tomatoes. *Proc. Amer. Soc. Hort.*, 33:532-535. 1935
181. Chodat, F. Influence de la lumière sur la transpiration végétale. *C. R. Seances Soc. Phys. et Hist. Nat. Genève*, 48:55-58. 1931
182. _____. Mesure du degré d'ouverture des stomates par la méthode de flottaison à l'acétone. *Compt. Rend. Soc. Phys. & Hist. Nat. Genève*, 57:247-252. 1940
183. _____, and S. Kann. Fluctuation diurne du taux de la transpiration chez deux plantes alpines. *Bul. Soc. Bot. Genève II*, 23:479-505. 1931
184. _____, and _____. Etude de la marche diurne de la transpiration de deux plantes alpines. *Compt. Rend. Soc. Phys. & Hist. Nat. Genève*, 48:50-55. 1931
185. Cholodny, N. Ueber einige mit der transpiration und wasser aufnahme verbundene electrophysiologische erscheinungen bei den pflanzen. *Bot. Arch.*, 5:439-457. 1924
186. Chu, C. R. Der einfluss des wassergehaltes der blätter der waldbäume auf ihre Lebensfähigkeit, ihre Saugkräfte und ihren Turgor. *Flora*, 130:385-437. 1935/36
187. Chung, C. H. A study of certain aspects of the phenomenon of transpiration periodicity. *Ph.D. Diss. Ohio State Univ.*, 1936
188. Claassen, E. Abundant stomata. *Amer. Botanist*, 30:14. 1924
189. Clapp, G. L. A quantitative study of transpiration. *Botan. Gaz.*, 45:254-267. 1908
190. Clark, A. W. Seasonal variation in water content and in transpiration of leaves of Fagus americana, Hemamelis virginiana, and Quercus alba. *Contr. Bot. Labor. Penn. Univ.*, 4:105-143. 1919
191. Clark, D. G., H. Hecht, O. F. Curtis, and J. I. Shafer, Jr. Stomatal behavior in inbred and hybrid maize. *Amer. Jour. Bot.*, 28:537-541. 1941
192. Clark, J. A., and J. Levitt. The basis of drought resistance in the soybean plant. *Physiol. Plantarum*, 9:598-606. 1956
193. Claussen, P. Ueber die durchlässigkeit der tracheidenwand für atmosphärische luft. *Flora*, 88:422-469. 1901
194. Clements, F. E., and E. V. Martin. Effect of soil temperature on transpiration in Helianthus annuus. *Plant Physiol.*, 9:619-630. 1934

195. Clements, H. F. Significance of transpiration. *Plant Physiol.*, 9:165-171. 1934
196. Clendenin, I. Stomata on *Anthoceros leavis*. *Asa Gray Bul.*, 4:43. 1896
197. Closs, R. L. Transpiration from plants with a limited water supply. United Nations Ed. Sci. & Cult. Org., *Arid Zone Res.*, 11:168-171. 1958
198. Clum, H. H. The effect of transpiration and environmental factors on leaf temperatures. *Amer. Jour. Bot.*, 13:194-230. 1926
199. Coltman-Rogers, C. Stomata on flat-leaved spruces. *Quart. Jour. For.*, 9:158-159. 1915
200. Comes, O. Azione della temperatura, della umidita relativa e della luce sulla traspirazione del le piante. *Rend. Accad. Sci. Fis. e Mat. Napoli*, 17:56-70. 1878
201. _____. Ricerche sperimentali intorno all'azione della luce sulla traspirazione delle piante. *Rend. R. Accad. Sci. Fis. e Mat. Napoli*, 18:267-282. 1879
202. _____. La luce e la traspirazione nelle piante. *Affi. R. Acad. Lincei III, Mem. Cl. Sci. Fis., Mat. e Nat.*, 7:55-88. 1880
203. Copeland, E. B. A new self-registering transpiration machine. *Botan. Gaz.*, 26:343-348. 1898
204. _____. The mechanism of stomata. *Annals of Bot.*, 16:327-365. 1902
205. _____. The rise of the transpiration stream: an historical and critical discussion. *Botan. Gaz.*, 34:161-193, 260-283. 1902
206. _____. On the water relations of the coconut palm. *Phillippine Jour. Sci.*, 1:6-58. 1906
207. _____. Transpiration by chaparral and its effect upon the temperature of leaves. *Cal. Univ. Publ. Bot.*, 17:1-21. 1932
208. Coster, C. de verdamping van verschillende vegetatieformen op Java. *Tectona*, 30:1-124. 1937
209. Crafts, A. S., H. B. Currier, and C. R. Stocking. Water in the physiology of plants. *Chronica Botanica Co.*, Waltham, Mass. 1949
210. Cribbs, J. E. On the foliar transpiring power of *Tilia*. *Trans. Illinois Acad. Sci.*, 11(1918):131-134. 1918
211. _____. Ecology of *Tilia americana*. I. Comparative studies of the foliar transpiring power. *Botan. Gaz.*, 68:262-286. 1919

212. Cross, F. B. May water loss from plants be reduced by foliage sprays? Proc. Okla. Acad. Sci., 7:129-131. 1927
213. _____. Oil spray reduces water loss. Rep. Okla. Agr. Expt. Sta. 1926-30:227-228. 1931
214. Cuesta Urcelay, J. Contribución al estudio de la adaptación de las plantas para disminuir la transpiración. Trab. Mus. Nac. Cien. Nat. Ser. Bot. n 18. 75 p. 1923
215. Cullinan, F. P. Transpiration studies with the apple. Proc. Amer. Soc. Hort. Sci., 17:232-240. 1920
216. _____, and J. R. Weinberger. Studies on the influence of soil moisture on growth of fruit trees and stomatal behavior of Elberta peaches. Proc. Amer. Soc. Hort. Sci., 29:28-33. 1932
217. Curtis, C. C. The work performed in transpiration and the resistance of stems. Bul. Torrey Bot. Club, 28:335-348. 1901
218. _____. Some observations on transpiration. Bul. Torrey Bot. Club, 29:360-373. 1902
219. Curtis, O. F. What is the significance of transpiration? Sci., 63: 267-271. 1926
220. _____. Leaf temperatures and the cooling of leaves by radiation. Plant Physiol., 11:343-364. 1936
221. _____. Transpiration and cooling of leaves. Amer. Jour. Bot., 23:7-10. 1936
222. _____. Wallace and Clum, "Leaf temperatures": A critical analysis with additional data. Amer. Jour. Bot., 25:761-771. 1938
223. Dachnowski, A. Transpiration in relation to growth and to the successional and geographic distribution of plants. Ohio Nat., 14:241-251. 1914
224. Dadykin, V. P., M. A. Darydova, and E. A. Akulova. On the dynamics of the expenditure portion of energy balance in leaves of higher plants. Akad. Nauk, SSSR Dok., 131(2):449-452. 1960
225. Danilov, A. N. Metod izucheniia transpiratsii odnovremenu s fotosintezom (A method for studying transpiration simultaneously with photosynthesis). Trudy Bot. Inst. Akad. Nauk, SSSR Ser. IV, 5:14-21. 1941
226. Darbishire, O. V. An apparatus for observing the transpiration stream. Botan. Gaz., 39:356-364. 1905

THE UNIVERSITY OF CHICAGO
DIVISION OF THE PHYSICAL SCIENCES
DEPARTMENT OF CHEMISTRY

RECEIVED
JAN 10 1960

FROM
DR. J. H. DUNN

TO
DR. R. M. M. SMITH

SUBJECT
POLYMERIZATION OF VINYL MONOMERS

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227. Darrow, G. M., and H. Sherwood. Transpiration studies on strawberries. Proc. Amer. Soc. Hort. Sci., 28:225-230. 1931
228. _____, and G. W. Dewey. Studies on the stomata of strawberry varieties and species. Proc. Amer. Soc. Hort. Sci., 32:440-447. 1934
229. Darwin, F. Observations on stomata by a new method. Proc. Cambridge Phil. Soc., 9:303-308. 1897
230. _____. Observations on stomata. Proc. Roy. Soc., 63:413-417. 1898
231. _____. Observations on stomata. Phil. Trans. Roy. Soc. London, B.(207), 190:531-621. 1898
232. _____. On a self-recording method applied to the movements of stomata. Botan. Gaz., 37:81-105. 1904
233. _____. On a method of studying transpiration. Proc. Roy. Soc. London B., 87:269-280. 1914
234. _____. The effect of light on the transpiration of leaves. Proc. Roy. Soc. London B., 87:281-299. 1914
235. _____. On the relation between transpiration and stomatal aperture. Phil. Trans. Roy. Soc. London B., 207:413-437. 1915
236. _____, and F. F. M. Pertz. On a new method of estimating the aperture of stomata. Proc. Roy. Soc. London B., 84:136-154. 1911
237. de Candollo, A. P. Mémoire sur les pores de l'écorce. Mém. div. Sav. Acad. Sci. Paris, 1(Sci.Math.Phys.):351-369. 1806
238. Deen, J. L., and M. H. Bruner. The effect of the 1932 eclipse upon the width of stomatal openings in gray birch. Ecology, 14:76-77. 1933
239. Denmead, O. T., and R. H. Shaw. Evapotranspiration in relation to the development of the corn crop. Agron. Jour., 51(12):725-726. 1959
240. Desai, M. C. Effect of certain nutrient deficiencies on stomatal behavior. Plant Physiol., 12:253-283. 1937
241. Deulian, M. K. Transpirationsintensität und entwicklung des netzes der nerven bei einigen arten der gattung Ranunculus. Trudy Botan. Opytn. Stan. Weronesh., 1:28-32. 1929
242. de Vries, D. A., and R. H. A. van Duin. Some considerations on the diurnal variation of transpiration. Netherl. Jour. Agr. Sci., 1:27-34. 1953

1. The first part of the report deals with the general situation of the country and the progress of the work during the year. It is a summary of the work done and the results achieved. It is a general statement of the work done and the results achieved.

2. The second part of the report deals with the specific work done during the year. It is a detailed statement of the work done and the results achieved. It is a detailed statement of the work done and the results achieved.

3. The third part of the report deals with the financial statement of the work done during the year. It is a statement of the work done and the results achieved. It is a statement of the work done and the results achieved.

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243. Diachun, S. Stomatal behavior in field tobacco. Trans. Kentucky Acad. Sci., 9:20-23. 1941
244. _____, and W. D. Valleau. Relation of stomatal opening to water soaking of tobacco leaves. Amer. Jour. Bot., 26:347-351. 1939
245. Dietrich, M. Die transpiration der schatten- und sonnen-pflanzen in ihren beziehungen zum standort. Jahrb. wiss. Bot., 65:98-194. 1925
246. Dixon, H. H. Note on the role of osmosis in transpiration. Proc. Roy. Irish Acad., 3:767-775. 1896
247. _____. On the effects of stimulative and anaesthetic gases on transpiration. Proc. Roy. Irish Acad. 3s, 4:618-626. 1896-98
248. _____. On the physics of the transpiration current. Notes Bot. School Trinity Col. Dublin, 1:57-91. 1897
249. _____. Transpiration into a saturated atmosphere. Proc. Roy. Irish Soc. III, 4:627-635. 1898
250. _____. On the transpiration current in plants. Proc. Roy. Soc. London B., 79:41-57. 1907
251. _____. Transpiration and the ascent of sap in plants. The London Macmillan Company, Ltd. 1914
252. _____. The transpiration stream, being a course of three lectures delivered before the University of London in January 1924. Univ. London Press, Ltd. 1924
253. _____. Subaqueous transpiration. Scient. Proc. Roy. Dublin Soc. N. S., 22:55-57. 1938
254. _____, and J. Joly. The path of the transpiration current. Annals of Bot., 9:416-419. 1895
255. _____, and T. A. Bennet-Clark. The stomatic control of transpiration. Nature, 126:601. 1930
256. Dodge, B. O. Effect of the orange rusts of Rubus on the development and distribution of stomata. USDA Jour. of Ag. Res., Vol. xxv, No. 12, 495-500. 1923
257. Dole, E. J. Studies on the effect of air, temperature and relative humidity on the transpiration of Pinus strobus. Vt. Sta. Bul. 238. 1924
258. Dorokhov, L. M. Effect of CO₂ upon transpiration and stomatic apparatus in plants. Compt. Rend. (Doklady) Acad. Sci. URSS, 81:77-80. 1933

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3. The third part of the document addresses the operational aspects of the organization. It describes the various processes and procedures that are in place to ensure the efficient and effective delivery of services. This section also discusses the various challenges that the organization is facing and how they are being addressed.

4. The fourth part of the document discusses the human resources of the organization. It provides a detailed overview of the current staff levels and the various roles and responsibilities of the different departments. This section also discusses the various training and development programs that are in place to ensure that the staff is equipped with the necessary skills and knowledge to perform their duties effectively.

5. The fifth part of the document discusses the legal and regulatory aspects of the organization. It provides a detailed overview of the various laws and regulations that the organization is subject to and how they are being complied with. This section also discusses the various legal risks and how they are being managed to ensure the organization's legal compliance.

6. The sixth part of the document discusses the environmental and social aspects of the organization. It provides a detailed overview of the various environmental and social issues that the organization is facing and how they are being addressed. This section also discusses the various initiatives that are in place to promote sustainability and social responsibility.

7. The seventh part of the document discusses the future of the organization. It provides a detailed overview of the various strategic goals and objectives that the organization is pursuing and how they are being implemented. This section also discusses the various challenges that the organization is facing and how they are being addressed to ensure the organization's long-term success.

259. Dowd, O. J. Studies in the transpiration rate of apple varieties. Proc. Amer. Soc. Hort. Sci., 28:590-593. 1931
260. Dreibelbis, F. R., and L. L. Harrold. Water-use efficiency of corn, wheat and meadow crops. Agron. Jour. 50(9):500-503. 1958
261. Dufrenoy, J. Les facteurs physiques de la transpiration chez les plantes et la transpiration des feuilles parasitées. Rev. Gén. Sci. Ann., 29:565-566. 1918
262. Duggar, B. M., and J. S. Cooley. The effect of surface films and dusts on the rate of transpiration. Ann. Mo. Bot. Gard., 1:1-22. 1914
263. _____, and _____. The effect of surface films on the rate of transpiration. Experiments with potted potatoes. Ann. Mo. Bot. Gard., 1:351-356. 1914
264. _____, and W. W. Bouns. The effect of Bordeaux mixture on the rate of transpiration. Ann. Mo. Bot. Gard., 5:153-176. 1918
265. Dugger, W. M. The permeability of non-stomate leaf epidermis to carbon dioxide. Plant Physiol., 27:489-499. 1952
266. Eaton, F. M. Cell-sap concentration and transpiration as related to age and development of cotton leaves. Jour. Agr. Res., 40:791-805. 1930
267. _____, and G. O. Belden. Leaf temperatures of cotton and their relation to transpiration and varietal differences and yields. USDA Tech. Bul. 91. 1929
268. _____, and D. R. Ergle. Carbohydrate accumulation in the cotton plant at low moisture levels. Plant Physiol. 23:169-187. 1948
269. Eckardt, F. Transpiration et photosynthese chez un xérophYTE mésomorphe. Physiol. Plantarum, 6:253-261. 1953
270. Eckerson, S. H. The number and size of stomata. Botan. Gaz., 46: 221-224. 1908
271. Eggert, R. The construction and installation of thermocouples for biological research. Jour. Agr. Res., 72:341-355. 1946
272. Eidmann, F. E. Untersuchungen über die Wurzelatmung und Transpiration unserer Hauptholzarten. Schriftenr. Akad. Dtsch. Forstw., 5. 1943
273. Ekambaram, T., and M. Rao. Studies in absorption and transpiration. I. Cut shoots treated with 20% formalin. Jour. Indian Bot. Soc., 12:293-324. 1933

1. The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that proper record-keeping is essential for the transparency and accountability of the organization. This section also outlines the various methods used to collect and analyze data, ensuring that the information is reliable and up-to-date.

2. The second part of the document focuses on the financial aspects of the organization. It provides a detailed overview of the budget, including the projected income and expenses for the upcoming year. This section also discusses the various financial risks and how they are being managed to ensure the organization's financial stability.

3. The third part of the document addresses the operational challenges faced by the organization. It identifies the key areas where improvements are needed and outlines the strategies being implemented to address these challenges. This section also discusses the role of the various departments and how they are working together to achieve the organization's goals.

4. The fourth part of the document discusses the human resources aspect of the organization. It provides an overview of the current workforce, including the number of employees and their qualifications. This section also discusses the various HR policies and procedures, ensuring that the organization is attracting and retaining the best talent.

5. The fifth part of the document discusses the marketing and sales efforts of the organization. It provides an overview of the current marketing strategy and the various channels being used to reach the target audience. This section also discusses the sales performance and the various strategies being implemented to increase sales.

6. The sixth part of the document discusses the legal and compliance aspects of the organization. It provides an overview of the current legal framework and the various regulations that the organization is subject to. This section also discusses the various compliance measures being implemented to ensure that the organization is operating within the law.

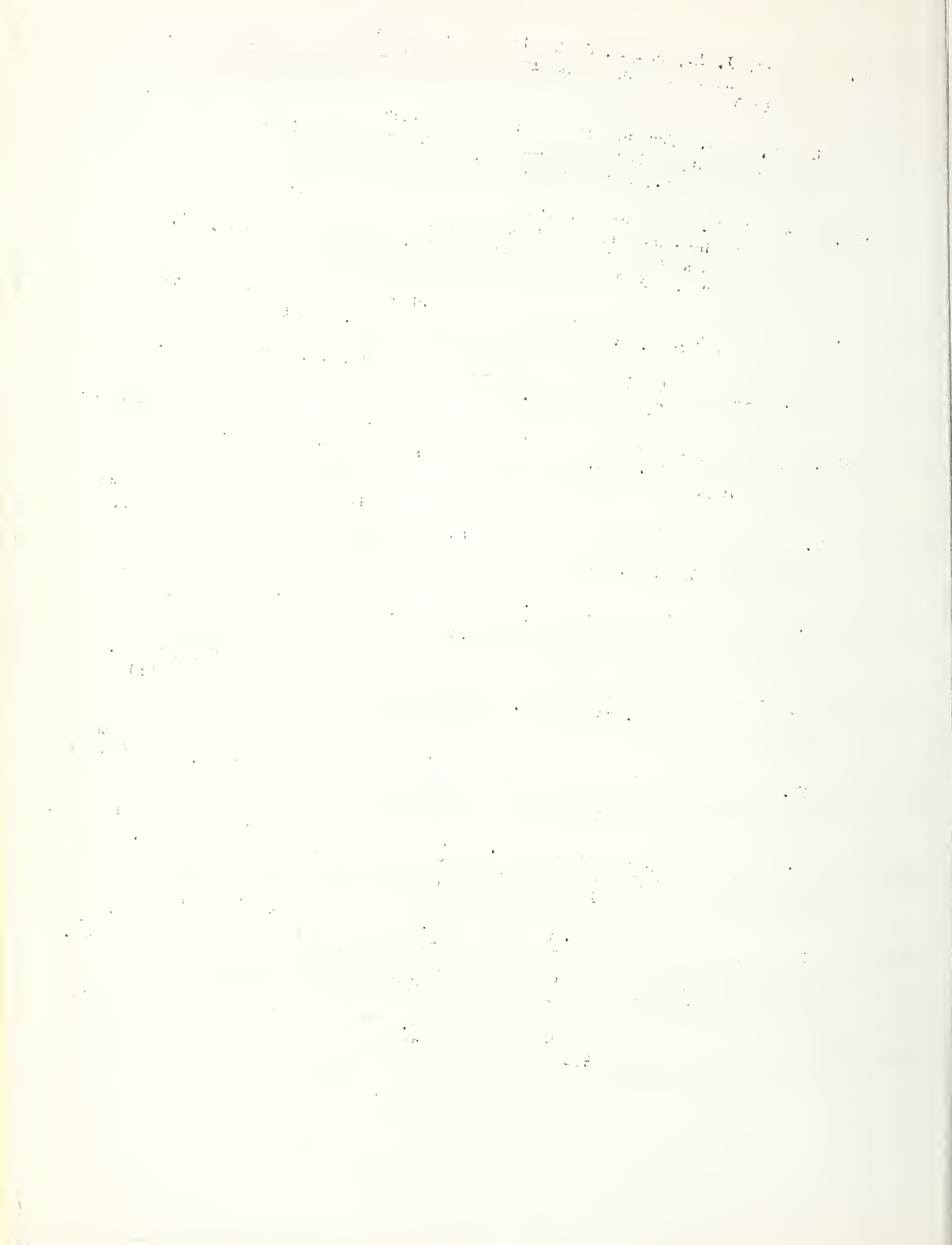
7. The seventh part of the document discusses the environmental and social aspects of the organization. It provides an overview of the current environmental and social policies and the various measures being implemented to ensure that the organization is operating in a sustainable and socially responsible manner.

8. The eighth part of the document discusses the overall performance of the organization. It provides an overview of the key performance indicators (KPIs) and the various measures being implemented to improve performance. This section also discusses the various challenges faced by the organization and the strategies being implemented to address these challenges.

9. The ninth part of the document discusses the future outlook of the organization. It provides an overview of the various opportunities and threats that the organization is facing and the strategies being implemented to capitalize on these opportunities and mitigate these threats.

10. The tenth part of the document discusses the conclusion of the report. It summarizes the key findings of the report and provides recommendations for the future. This section also discusses the various ways in which the organization can continue to improve its performance and achieve its goals.

274. Emerson, J. L., and A. C. Hildreth. Preliminary report on reducing transpiration on transplanted evergreens. *Sci.*, 77:433-434. 1933
275. Evans, G. C. Transpiration and water uptake of cut shoots: a note on an apparatus for simultaneous measurements in the field. *Jour. Ecol.*, 37:171-173. 1949
276. Evenari, M. The physiological anatomy of the transpiratory organs and the conducting systems of certain plants typical of the wilderness of Judaea. *Linnean Soc. London Jour. Bot.*, 51: 339-407. 1933
277. _____. Types of transpiration behaviour in succulents and xerophytes. *Chron. Botanica*, 6:367-368. 1941
278. _____. Ecologia de las plantas de desierto. *Rev. Argent. Agronomia*, 16:121-148. 1949
279. _____. The water balance of plants in desert conditions. *Desert Res. Proc. Int. Symp. Jerusalem, 1952. Spec. Publ. No. 2.* 1953
280. _____, and R. Richter. Physiological-ecological investigations in the wilderness of Judaea. *Linnean Soc. London Jour. Bot.*, 51:333-381. 1937
281. Fernández Gianotti, A. A. Densidad de estomas en las variedades de naranje dulce (*C. sinensis* (Linn.) Osbeck) Valencia y Lue Gim Gong. *Ingen. Agron.* 7:193-197. 1945
282. Ferri, M. G. Transpiração de plantas permanentes dos "cerrados". *Bol. Fac. Fil. Ciên. e Letras, São Paulo 61, Botânica*, 4:155-224. 1944
283. _____, and A. Ix. Stomatal behavior as influenced by treatment with α -naphthoxyacetic acid. *Boyce Thompson Inst. Contrib.*, 15: 283-290. 1948
284. _____, and M. Rachid. Further information on the stomatal behavior as influenced by treatment with hormone-like substances. *Anais Acad. Brasil. Cienc.*, 21:155-166. 1949
285. _____, and L. G. Labouriau. Water balance of plants from the "Caatinga." I. Transpiration of some of the most frequent species of the "Caatinga" of Paulo Afonso (Bahia) in the rainy season. *Rev. Brasil. Biol.*, 12:301-312. 1952
286. Finch, A. H., and C. W. van Horn. The moisture relations of pecan leaves. *Sci.*, 33:260. 1936



287. Fennell, H. H. Effect of wind on plant growth. Jour. Amer. Soc. Agron., 20:1206-1210. 1928
288. Firbas, F. Ueber die ausbildung des leitungssystems und das vorhalten der spaltöffnungen im frühjahr bei pflanzen des Mediterrangebietes und der tunesischen steppen und wüsten. Beih. Bot. Centralbl. Abt. I., 48:451-465. 1931
289. _____. Die wirkung des windes auf die transpiration. Ber. Deut. Bot. Ges., 49:443-452. 1931
290. _____. Untersuchungen über den wasserhaushalt der Hochmoorpflanzen. Jahrb. wiss. Bot., 74:457-696. 1931
291. Fischer, M. Beiträge zur Kenntnis der spaltenapparate an früchten und zur durchlüftung der hohlfrüchte. Beih. Bot. Centralbl. Abt. I, 45:271-389. 1929
292. _____. Ergebnisse der spaltöffnungsforschung an früchten. Biol. Zentralbl., 49:231-251. 1929
293. Flint, L. H., and C. F. Moreland. A study of the stomate in sugarcane. Amer. Jour. Bot., 33:80-82. 1946
294. Flory, E. L. Comparison of the environment and some physiological responses of prairie vegetation and cultivated maize. Ecology, 17:67-103. 1936
295. Flück, H. Der diagnostische wert der spaltöffnungsgrößen offizineller blätter. Pharm. Acta. Helv. (Zürich), 6:125-133, 187-194, 231-239. 1931
296. Follmann, G. Der wasseraustausch von sprosszellen virusinfizierten Gefasspflanzen. Ber. Deut. Bot. Ges., Vol. 72, No. 9:398-408. 1959
297. Foster, A. C., and E. C. Tatman. Effect of environmental factors on the transpiration and growth of tomato plants. USDA Jour. Agr. Res., 61:697-720. 1941
298. _____, and _____. Effect of certain fungicides and environmental factors on the rate of transpiration of tomato plants. USDA Jour. Agr. Res., 61:721-735. 1941
299. Francey, P. Etude de l'appareil stomatique chez les dicotylédones dans un but taxinomique. Bul. Soc. Vaud. Sci. Nat., 59:1-12. 1936

300. Franco, C. M., and R. Inforzato. Quantidade de água transpirada pelo cafeeiro cultivado ao sol. *Bragantia* (São Paulo), 10:247-258. 1950
301. Frear, D. E. H. Photoelectric apparatus for measuring leaf areas. *Plant Physiol.*, 10:569-574. 1935
302. Freeland, R. O. Effect of transpiration upon the absorption of mineral salts. *Amer. Jour. Bot.*, 24:373-374. 1937
303. _____. Photosynthesis in relation to stomatal frequency and distribution. *Plant Physiol.*, 23:595-600. 1948
304. _____. Green pigments in guard cells. *Amer. Jour. Bot.*, 37:677. 1950
305. _____. The green pigment and physiology of guard cells. *Sci.*, 114:94-95. 1951
306. Freeman, G. F. A method for the quantitative determination of transpiration in plants. *Bot. Gaz.*, 46:118-129. 1908
307. _____. Studies in evaporation and transpiration. *Botan. Gaz.* 70:190-210. 1920
308. Frei, L. Influence of soil moisture on the transpiration capacity of plants. *Bul. Soc. Nat. Leningrad*, 53:179-210. 1924
309. Freudenberger, H. Die reaktion der schliesszellen auf Kohlensäure und Sauerstoffenzug. *Protoplasma*, 35:15-54. 1940
310. Frey, L. The influence of soil moisture on the transpiring power of plants. *Trav. Soc. Natur. Petrograd*, 33:173. 1923
311. Friend, H. Problems of plant life. VI. Transpiration. *Gard. Chron.* III, 86:130. 1929
312. _____. Problems of plant life. IX. X. Breathing pores or stomata. *Gard. Chron.* III, 86:247-248. 1929
313. Fritschen, L. J., and R. H. Shaw. Transpiration and evapotranspiration of corn. *Agron. Abs.*, 5:241. 1959
314. Froeschel, P. Das Druckstomatometer. Ein neuer pflanzenphysiologischer apparat zur messung der apertur der stomata. *Cellule*, 56:63-70. 1953
315. _____, and P. Chapman. A new method of measuring the size of the stomatal apertures. *Cellule*, 54:233-250. 1951

316. Fukuda, Y. Über die hydratur der pflanzen und eine empirische Formel der Verdunstung und transpiration. Pflanzenforsch., 10:79 p. 1935
317. Furr, J. R., and J. R. Magness. Preliminary report on relation of soil moisture to stomatal activity and fruit growth of apples. Amer. Soc. Hort. Sci., 27:212-218. 1930
318. _____, and E. S. Degman. Relation of moisture supply to stomatal behavior of the apple. Proc. Amer. Soc. Hort. Sci., 28:547-551. 1931
319. _____, and C. A. Taylor. Growth of lemon fruits in relation to moisture content of the soil. USDA Tech. Bul. 640. 1939
320. Füsser, K. Die transpiration und die transpirationswiderstände verschiedener pflanzentypen. Planta, 19:485-533. 1933
321. Gaastra, P. Light energy conversion in field crops in comparison with the photosynthetic efficiency under laboratory conditions. Mededelingen Landbouwhogeschool, Wageningen, Nederland, 58(4): 1-12. 1958
322. _____. Photosynthesis of crop plants as influenced by light, CO₂, temperature, and stomatal diffusion resistance. Thesis Wageningen:83-84. Neth. Jour. Agr. Sci., 8:No. 1:1-92. 1960
323. Gabrielsen, E. K. Threshold value of carbon dioxide concentration in photosynthesis of foliage leaves. Nature, 161:138-139. 1948
324. _____. Photosynthesis in leaves at very low carbon dioxide concentrations. Nature, 163:359-360. 1949
325. Gairon, S., J. Rubin, and A. Cohen. Absorption, retention, and transpiration of THO by plants from tritiated water. Israel Res. Council B., 8(2/3):165-166. 1959
326. Gamil, M. Effect of variable vapor concentrations of ethereal oils upon transpiration and water absorption. Bul. Torrey Bot. Club, 79:459-470. 1952
327. Ganong, W. F. New precision appliances for use in Plant Physiology. II, Botan. Gaz., 39:145-152. 1905
328. Garestier, R. La transpiration et l'absorption des sels nutritifs dans les plantes supérieures. Tours. Imprimerie Arrault et Co. 167 p. 1939
329. Gäumann, E. Über die pflanzliche transpiration. I. Die kutikulare transpiration. Zeit. Bot., 38:225-327. 1942

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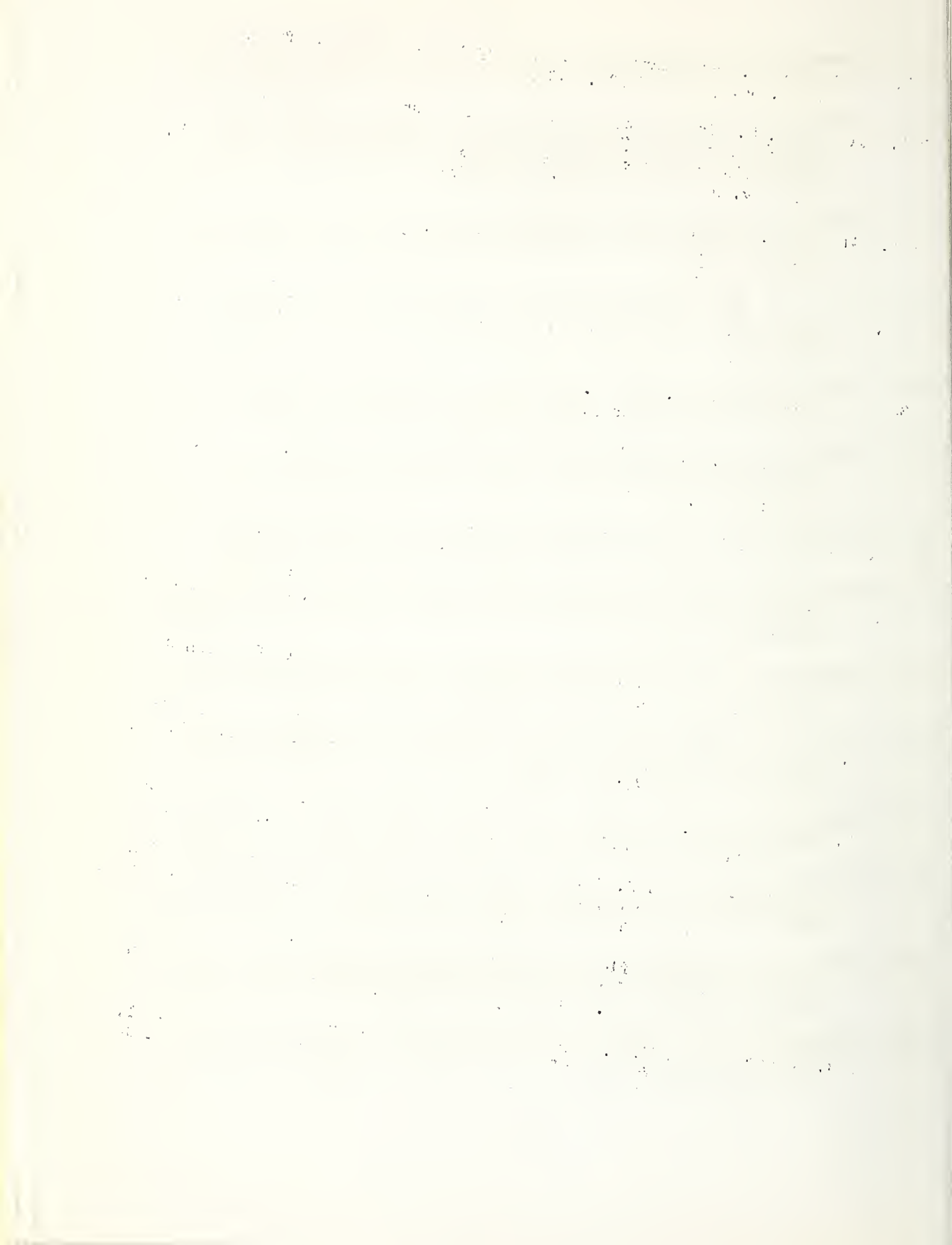
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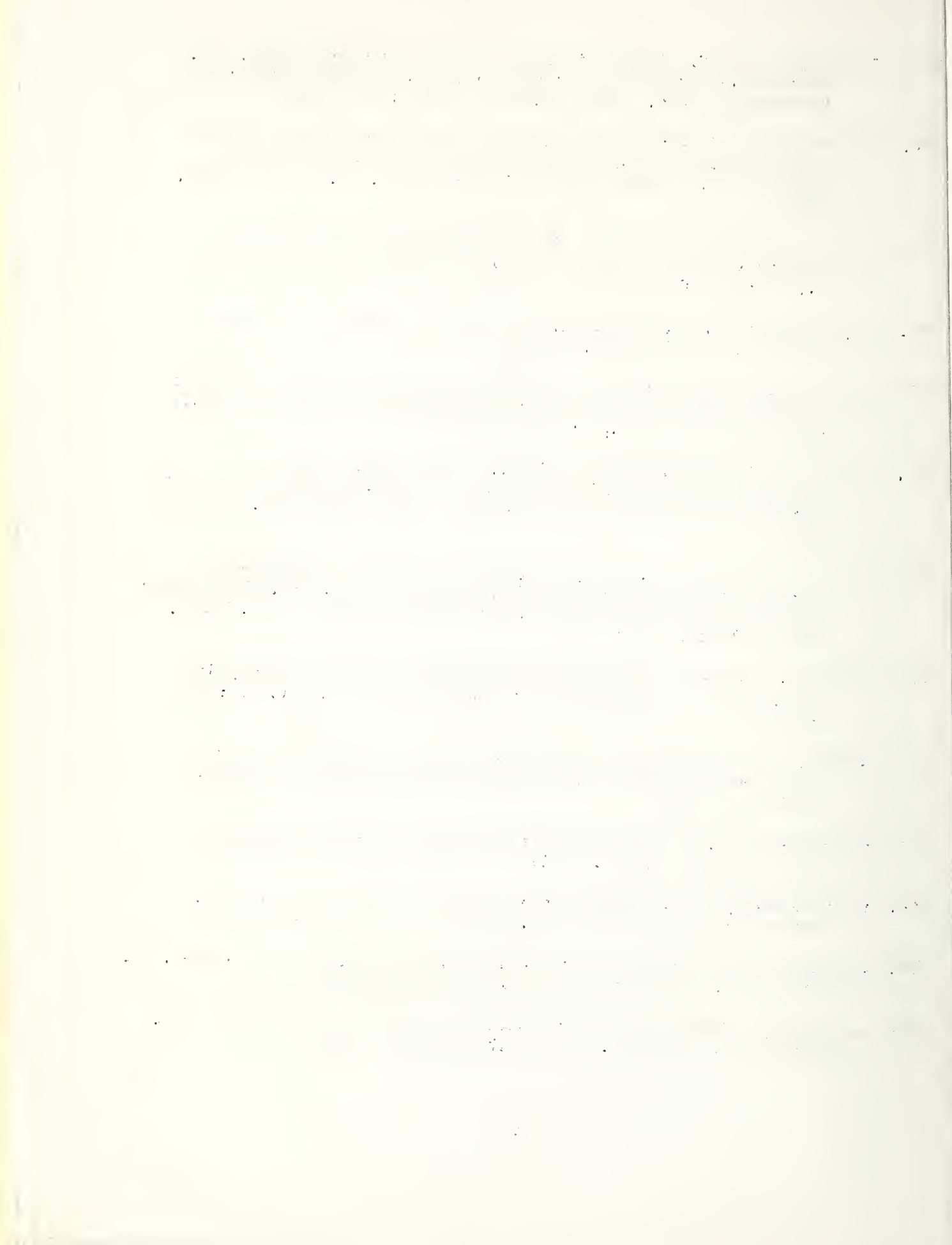
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330. Gäumann, E., and O. Jaag. Untersuchungen über die pflanzliche transpiration. Ber. Schweiz. Bot. Ges., 45:411-513. 1936
331. _____, and _____. Der einfluss der luftfeuchtigkeit auf die reaktionsgeschwindigkeit der spaltöffnungen. Ber. Deut. Bot. Ges., 55:236-252. 1937
332. _____, and _____. Untersuchungen über die stomatäre transpiration. I. Quercus robur. Ber. Schweiz. Bot. Ges., 48:45-78. 1939
333. _____, and _____. Der einfluss des windes auf die pflanzliche transpiration. I. Ber. Schweiz. Bot. Ges., 49:178-238. 1939
334. _____, and _____. Der einfluss des windes auf die pflanzliche transpiration. II. Ber. Schweiz. Bot. Ges., 49:555-626. 1939
335. _____, and _____. Über die stomatäre transpiration von Phyllitis scolopendrium (L). Ber. Deut. Bot. Ges., 57:2-28. 1939
336. Gerdel, R. W., and R. M. Salter. Measurement of leaf area using the photoelectric cell. Jour. Amer. Soc. Agron., 20:635-642. 1928
337. Gertz, O. D. Studier öfver Klyföppningarnas morfologi med. särskild hänsyn till deras patologiska utbildningsformer af Otto Gertz. Med. 182 Textbilder (Zusammenfassung und Figurenerklärung in Deutscher Sprache) 1919
338. _____. Über einen neuen typus stomatärer thyllenbildung nebst anderen beobachtungen zur pathologischen anatomic des spaltöffnungsapparates bei Paeonia paradoxa. Ber. Deut. Bot. Ges. 37:237-244. 1919
339. Gessner, F. Die stomatoden des Victoriablattes. Planta, 38:123-131. 1950
340. Giddings, L. A. Transpiration of Silphium laciniatum. Plant World, 17:309-328. 1914
341. Gilbert, B. E., and W. L. Adams. Moisture fluctuations in extracted plant solutions and in leaf tissue. Plant Physiol., 4:529-536. 1929
342. Gioelli, F. Coefficiente de traspirazione e resistenza alla siccità. Lavori R. Ist. Bot. Palermo, 2:139-146. 1931
343. _____. Su alcuni dei fattori che possono determinare le variazioni del coefficiente de traspirazione nelle piante. Nuovo Gior. Bot. Ital., 39:700-702. 1932
344. Giroux, J., and Soroceanu. Recherches comparatives sur la transpiration de quelques espèces ligneuses et herbacées du Bas-Languedoc. Rev. Gén. Bot., 48:589-612, 663-667. 1936

345. Girton, R. E. An inexpensive recording transpirometer. *Proc. Ind. Acad. Sci.*, 41:127-132. 1931
346. Globin, P. D. Chastie transpiratsii v pogloshchenii mineral'nykh solei rasteniiami (The participation of transpiration in the absorption of mineral salts by plants). *Trudy Leningr. Obschch. Estestv. Otd. Bot.*, 67(3):3-25. 1939
347. Glover, J. A method for the continuous measurement of transpiration of single leaves under natural conditions. *Annals of Bot. N. S.*, 5:25-34. 1941.
348. ———. The apparent behaviour of maize and sorghum stomata during and after drought. *Jour. Agr. Sci. (London)*, 53(3):412-416. 1959
349. Gopalakrishnan, R., and K. C. Ananth. Transpirational studies on coffee (preliminary). *Indian Coffee*, 24(1):20-28. 1960
350. Gordiagin, A. Ueber die winterliche transpiration einiger holzegenächse Ostrusslands. *Beih. Bot. Centralbl. Abt. I.*, 46:93-118. 1929
351. Goryshina, T. K. On transpiration of spring ephemeroids of the oak forest. *Akad. Nauk SSSR Dok.*, 129(5):1180-1182. 1959
352. Gracianin, M. Contribution à l'étude de la relation entre la transpiration et la résorption des ions. *C. R. Acad. Sci. Paris*, 195:899-901. 1932
353. Gradmann, H. Die windschutzeinrichtungen an den spaltöffnungen der pflanzen. *Jahrb. wiss. Bot.*, 62:449- 1923
354. ———. Untersuchungen über die abhängigkeit der transpiration und des welkens von den wasserhältnissen des bodens. *Jahrb. wiss. Bot.*, 76:553-663. 1932
355. Graham, W. G., and K. M. King. Fraction of net radiation utilized in evapotranspiration from a corn crop. *Agron. Abs.*, p. 5. 1959
356. Gray, J., and G. J. Peirce. The influence of light upon the action of stomata and its relation to the transpiration of certain grains. *Amer. Jour. Bot.*, 6:131-155. 1919
357. Greb, H. Der einfluss tiefer temperatur auf die wasser- und stickstoffaufnahme der pflanzen und ihre Bedeutung für das "Xeromorphieproblem." *Planta*, 48:523-563. 1957
358. Greenidge, K. M. H. Studies in the physiology of forest trees. I. Physical factors affecting the movement of moisture. *Amer. Jour. Bot.*, 41:807-811. 1954



359. Greenidge, K. N. H. Studies in the physiology of forest trees. II. Experimental studies of fracture of stretched water columns in transpiring trees. Amer. Jour. Bot., 42:28-37. 1955
360. Gregory, F. G. A convenient method for attaching potometers and an example of its use in measuring the uptake of water by leaves during recovery from wilting. Annals of Bot., N. S., 2:253-255. 1938
361. _____, and H. L. Pearse. The resistance porometer and its application to the study of stomatal movement. Proc. Roy. Soc. B., 114:477-493. 1934
362. _____, and J. I. Armstrong. The diffusion porometer. Proc. Roy. Soc. B., 121:27-42. 1936
363. _____, and H. L. Pearse. The effect on the behaviour of stomata of alternating periods of light and darkness of short duration. Annals of Bot., N. S., 1:3-10. 1937
364. _____, F. L. Milthorpe, H. L. Pearse and E. J. Spencer. Experimental studies of the factors controlling transpiration. I. Apparatus and experimental technique. Jour. Exptl. Bot., 1:1-14. 1950
365. _____, _____, _____, and _____. Experimental studies of the factors controlling transpiration. II. The relation between transpiration rate and leaf water content. Jour. Exptl. Bot., 1:15-28. 1950
366. Griep, W. Über den einfluss von aussenfactoren auf die wirkung des windes auf die transpiration der pflanzen. Zeit. Bot., 36:1-54. 1940/41
367. Griffith, A. L. The stomates and early growth of some timber trees of the Malabar Coast. Indian Forest Rec. New Series, Silviculture, 6(2):92 p. 1946
368. Grinevetshii, B. B. Anatomische studien ueber die spaltöffnungen. Jurjew (Derpat) 134 p. 1913
369. Grossenbacher, K. Autonomic cycle of rate of exudation of plants. Amer. Jour. Bot., 26:107-199. 1939
370. Guettard, J. S. Mémoire sur la transpiration insensible des plantes. I. Mém. Hist. Acad. Sci. Paris. 1748:569-586. 1752
371. _____. Mémoire sur la transpiration insensible des plantes. II. Mém. Hist. Acad. Sci. Paris. 1749:265-317. 1753



372. Gustafson, F. G. The effect of a decrease in the amount of transpiration on the growth in certain plants. Mich. Acad. Sci., Arts, and Letters, 19:65-82. 1934
373. Haas, A. R. C., and F. F. Halma. Relative transpiration rates in citrus leaves. Botan.Gaz., 93:466-473. 1932
374. Haas-Poetzl, I. Die Wirkung von Salzen auf die Spaltöffnungsbewegung. Beih. Bot. Centralbl., 47:255-270. 1930
375. Haberlandt, F. Ueber die transpiration der gewachse insbesondere jene der getreidearten. Landw. Jahrb. bd. 5:63-86. 1876
376. Haberlandt, G. Zur Kenntniss des Spaltöffnungsapparates. Flora, 45:97. 1887
377. _____. Physiologische Pflanzenanatomie (1904). English Trans. Physiological Plant Anatomy. London MacMillan. 1914
378. _____. Zur entwickelungsphysiologie des spaltöffnungsapparates. Sitzungsab. Preuss. Akad. Wiss., 325-336. 1924
379. _____. Zur physiologie und pathologie der spaltöffnungen. Sitzungsab. Preuss. Akad. Wiss., 353-369. 1932
380. Hafez, M. G. A. Effect of variable vapor concentrations of ethereal oils upon transpiration and water absorption. Bul. Torrey Bot. Club, 79:459-470. 1952
381. _____. Effects of some essential oil vapors on the stomata of Eupatorium and Mentha. Plant Physiol., 33:177-181. 1958
382. _____. Effects of rosemary and thyme oil vapors on the stomata of cherry laurel. Plant Physiol., 33:181-185. 1958
383. Hagan, R. M. Soil aeration as a factor in water absorption by the roots of transpiring plants. Plant Physiol., 25:748-762. 1950
384. Hagen, F. Zur physiologie des spaltöffnungsapparates. Beit. Allgum. Botan., 1:260-291. 1918
385. Haines, F. M. A self-recording potometer with a note on transpiration under pressure. Annals of Bot., 46:1051-1060. 1932
386. _____. Transpiration and pressure deficit. I. Apparatus and preliminary experiments. Annals of Bot., 49:213-238. 1935
387. _____. Transpiration and pressure deficit. II. Annals of Bot., 49:521-565. 1935

388. Haines, F. M. Transpiration and pressure deficit. III. Observations by the thermopile method. *Annals of Bot.*, 50:1-22. 1936
389. _____. Transpiration and pressure deficit. IV. The effects of small deficits: apparatus and preliminary experiments. *Annals of Bot.*, 50:283-291. 1936
390. _____. Transpiration and pressure deficit. V. The direct measurement of transpiration under pressure by a weighing method. *Annals of Bot., N. S.*, 2:627-648. 1938
391. Hales, S. *Vegetable Staticks*. Innys & Woodward, London. 1727
392. Hall, A. D. Simple apparatus for the measurement of transpiration from a shoot. *Annals of Bot.*, 15:558-560. 1901
393. Hamorak, N. Beiträge zur mikrochemie des spaltöffnungsapparates. *Sitzungsb. Akad. Wiss. Wien Math-naturwiss. Kl.* 124:447-479. 1915
394. _____. Ein neuer transpirograph. *Ber. Deut. Bot. Ges.*, 46:2-7. 1928
395. _____. Das offene potometer. *Ber. Deut. Bot. Ges.*, 47:371-385. 1929
396. _____, and M. Libynskyj. Das horizontal porometer. *Planta*, 9:639-644. 1930
397. Hanes, C. S. The breakdown and synthesis of starch by an enzyme system from pea seeds. *Proc. Roy. Soc. London Ser. B*, 128:421-450. 1940
398. _____. The reversible formation of starch from glucose-1-phosphate catalyzed by potato phosphorylase. *Proc. Roy. Soc. London Ser. B*, 129:174-208. 1940
399. _____. Enzymatic synthesis of starch from glucose-1-phosphate. *Nature*, 145:348-349. 1940
400. _____, and J. E. Maskell. The influence of hydrogen-ion concentration upon the equilibrium state in phosphorylase systems. *Biochem. Jour.*, 36:76-79. 1942
401. Harder, R. Beobachtungen über die temperatur der assimilationsorgane sommergrünen pflanzen der algerischen wüste. *Zeit. Bot.*, 23:703. 1930
402. _____, P. Filzer, and A. Lorenz. Notizen über evaporation und transpiration in der algerischen wüste bei Beni Unif. *Flora*, 123 (N.S.28):34-49. 1933

403. Harms, H. Beziehungen zwischen stomataweite, lichtstärke und lichtfarbe. *Planta*, 25:155-193. 1936
404. Harris, F. S. Long versus short periods of transpiration in plants used as indicators of soil fertility. *Proc. Amer. Soc. Agron.*, 2:93-102. 1910
405. Hart, H. Relation of stomatal behavior to stem rust resistance in wheat. *Jour. Agr. Res.*, 39:929-948. 1929
406. Härtel, O. Über die pflanzliche kutikulartranspiration und ihre Beziehungen zur Membranquellbarkeit. *Sitzungsb. Akad. Wiss. Wien Math-naturwiss. Kl., Abt. I.*, 156:57-86. 1947
407. _____. Über die beeinflussung der transpiration durch kupferkalkbrühe. *Phyton*, 1:244-257. 1949
408. _____. Ionenwirkung auf die kutikulartranspiration von blättern. *Protoplasma*, 40:107-136. 1951
409. _____. Neues über die kutikulartranspiration. *Ber. Deut. Bot. Ges.*, 63:31. 1951
410. Harter, L. L. The influence of a mixture of soluble salts, principally sodium chloride, upon the leaf structure and transpiration of wheat, oats, and barley. *USDA Plant Ind. Bul.* 134. 1908
411. Hartsuijker, K. Kritische bemerkungen über einige der wichtigsten methoden zur emittlung des offnungszustandes der spaltöffnungen. *Rec. Trav. Bot. Neerland*, 32:516-542. 1935
412. Harvey, R. B. Use of dyes for the localization of transpiration over the leaf surface. *Ecol.*, 11:233-235. 1930
413. _____. Tracing the transpiration stream with dyes. *Amer. Jour. Bot.*, 17:657-661. 1930
414. _____. The relative transpiration rate at infection spots on leaves. *Phytopath.*, 20:359-362. 1930
415. Hasselbring, H. The effect of shading on the transpiration and assimilation of the tobacco plant in Cuba. *Botan. Gaz.*, 57:257-286. 1914
416. Hawkins, R. S. Variations of water and dry matter in the leaves of Pina and Acala cotton. *Ariz. Sta. Tech. Bul.*, 17:417-444. 1927

417. Heath, O. V. S. An experimental investigation of the mechanism of stomatal movement, with some preliminary observations upon the response of the guard cells to "shock." *New Phytologist*, 37: 385-395. 1938
418. _____. Experimental studies of the relation between carbon assimilation and stomatal movement. I. Apparatus and technique. *Annals of Bot., N. S.*, 3:469-496. 1939
419. _____. Experimental studies of the relation between carbon assimilation and stomatal movement. II. The use of the resistance porometer in estimating stomatal aperture and diffusive resistance. Part I. A critical study of the resistance porometer. *Annals of Bot. N. S.*, 5:455-500. 1941
420. _____. Role of starch in light-induced stomatal movement, and a new reagent for staining stomatal starch. *Nature*, 159:647-648. 1947
421. _____. Studies in stomatal action. Control of stomatal movement by a reduction in the normal carbon dioxide content of the air. *Nature*, 161:179-181. 1948
422. _____. Studies in stomatal behaviour. II. The role of starch in the light response of stomata. Part I. Review of literature, and experiments on the relation between aperture and starch content in the stomata of Pelargonium zonale. *New Phytologist*, 48:186-211. 1949
423. _____. Carbon dioxide in the intercellular spaces of leaves during photosynthesis. *Nature*, 164:822-823. 1949
424. _____. Studies in stomatal behaviour. V. The role of carbon dioxide in the light response of stomata. Part I. Investigation of the cause of abnormally wide stomatal openings within porometer cups. *Jour. Exptl. Bot.*, 1:29-62. 1950
425. _____. Assimilation by green leaves with stomatal control eliminated. *Soc. Exptl. Biol. Symp.*, 5:94-114. 1951
426. _____. Studies in stomatal behaviour. II. The role of starch in the light response of stomata. Part 2. The light response of stomata of Allium cepa L., together with some preliminary observations on the temperature response. *New Phytologist* 51: 30-47. 1952
427. _____. The part played by stomata in resistance to drought. *Rapp. et Communicat. VIII Congr. Internat. Paris, Sect. 11 et 12*, 241-242. 1954

428. Heath, O. V. S. Light and carbon dioxide in stomatal movement. Handbuch der Pflanzenphysiologie, 17(2):415-464. 1959
429. _____, and W. T. Williams. Studies in stomatal action. Adequacy of the porometer in the investigation of stomatal aperture. Nature, 161:178-179. 1948
430. _____, and F. L. Milthorpe. Studies in stomatal behaviour. V. The role of carbon dioxide in the light response of stomata. Part 2. Preliminary experiments on the interrelations of light intensity, carbon dioxide concentration, and rate of air flow in controlling the movement of wheat stomata. Jour. Exptl. Bot., 1:227-243. 1950
431. _____, and J. Russell. The wheatstone bridge porometer. Jour. Exptl. Bot., 2:111-116. 1951
432. _____, and _____. Studies in stomatal behaviour. VI. An investigation of the light responses of wheat stomata with the attempted elimination of control by the mesophyll. Part I. Effects of light independent of carbon dioxide and their transmission from one part of the leaf to another. Jour. Exptl. Bot., 5:1-15. 1954
433. _____, and _____. Studies in stomatal behaviour. VI. An investigation of the light responses of wheat stomata with the attempted elimination of control by the mesophyll. Part 2. Interactions with external carbon dioxide, and general discussion. Jour. Exptl. Bot., 5:269-292. 1954
434. _____, and B. Orchard. Studies in stomatal behaviour. VII. Effects of anaerobic conditions upon stomatal movement--A test of Williams' hypothesis of stomatal mechanism. Jour. Exptl. Bot., 7:313-325. 1956
435. _____, and _____. Midday closure of stomata. Temperature effects on the minimum intercellular space carbon dioxide concentration. Nature, 180:180-181. 1957
436. _____, and H. Meidner. Midday closure of stomata. Effects of carbon dioxide and temperature on stomata of Allium cepa L. Nature, 180:181-182. 1957
437. Heiling, A. Influence of gaseous atmospheric impurities on plant transpiration. Phytopath. Z., 5:435-492. 1933
438. Heinicke, A. J. A method for studying the relative rates of transpiration of apple leaves and fruits. Proc. Amer. Soc. Hort. Sci., 26:312-314. 1929

1. The first part of the report is a general introduction to the subject of the study.

2. The second part of the report is a detailed description of the methods used in the study.

3. The third part of the report is a discussion of the results of the study.

4. The fourth part of the report is a conclusion and a list of references.

5. The fifth part of the report is a summary of the findings of the study.

6. The sixth part of the report is a list of the names of the authors and their affiliations.

7. The seventh part of the report is a list of the names of the reviewers and their comments.

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439. Heinicke, A. J., and N. F. Childers. The influence of water deficiency in photosynthesis and transpiration of apple leaves. *Proc. Amer. Soc. Hort. Sci.*, 33:155-159. 1936
440. Helige, H., and W. Friedl. Stomata-zahl vergrünter hydrangea-kelchblätter. *Phyton*, 2:299-301. 1950
441. Henderson, F. Y. On the effect of light and other conditions upon the rate of water loss from the mesophyll. *Annals of Bot.*, 40:307-533. 1926
442. _____. The preparation of "three colour" strips for transpiration measurements. *Annals of Bot.*, 50:321-324. 1936
443. Hendrickson, A. H. Transpiration rate of deciduous fruit trees as influenced by irrigation and other factors. *Proc. Amer. Soc. Hort. Sci.*, 18:145-147. 1921
444. _____. Certain water relations of the genus *Prunus*. *Hilgardia*, 1:479-524. 1926
445. _____, and F. J. Veihmeyer. Moisture distribution in soil in containers. *Plant Physiol.*, 16:821-826. 1941
446. _____, and _____. Permanent wilting percentages of soils obtained from field and laboratory trials. *Plant Physiol.*, 20:517-539. 1945
447. Henrici, M. Physiological plant studies in South Africa. II. Transpiration of grasses and other plants under arid conditions. *Rep. Dir. Veter. Educ. and Res. So. Africa*, 11/12:617-702. 1926
448. _____. Transpiration and water supply of South African plants. *So. Afr. Jour. Sci.*, 34:61-72. 1937
449. _____. The transpiration of different plant associations in South Africa. I. Transpiration of karoo bushes. *Sci. Bul. Dept. Agr. So. Africa* 135. 70 p. 1940
450. _____. Transpiration of large karoo bushes. *So. Afr. Jour. Sci.*, 37:156-163. 1941
451. _____. Transpiration of grasses in the sour mountain grassveld of the Drakensberg in comparison with the water loss of indigenous forests. *So. Afr. Jour. Sci.*, 39:155-163. 1943
452. _____. The transpiration of South African plant associations. III. Indigenous and exotic trees in the Drakensburg area. *Sci. Bul. No. 247, Union of South Africa*. 1945/46

453. Henrici, M. The transpiration of different plant associations in South Africa. IV. Parkland; Forest and Sour Mountain- Grassveld; Large Karoo Bushes. Sci. Bul. No. 244, Union of South Africa, 1946
454. _____. Transpiration of South African plant associations. II. Indigenous and exotic trees under semi-arid conditions. Sci. Bul. No. 248, Union of South Africa. 1946
455. _____. Transpiration studies. So. Afr. Sci., 2:36-38. 1948
456. Herrero Egaña, M., and A. Acerete Lavilla. Nota sobre la constitución epidérmica de las hojas del género Citrus. Bol. Inst. Nac. Invest. Agron. (Madrid), 4:113-119. 1941
457. _____, and _____. Los estomas de los frutos del género Citrus. Bol. Inst. Nac. Invest. Agron. (Madrid), 4:121-127. 1941
458. Hermann, W. Die blattbewegungen der marantaceen und ihre beziehung zur transpiration. Flora, 109:69-96. 1916
459. Herrmann, H. Über transpirationsschwankungen bei pflanzen unter konstanten aussenbedingungen. Biol. Gen., 7:469-496. 1931
460. Hertel, W. Beiträge zur Kenntnis masshafter Beziehungen im wasserhaushalt der pflanzen. I. Untersuchungen über die Grundlagen der Messmethodik und einige Messergebnisse. Flora, 133:143-214. 1938
461. Hetzer, W. A., and L. D. Volle. Stomatal counts of Kansas species in certain genera of the compositae. Kans. Acad. Sci. Trans., 53: 370-371. 1950
462. Heuser, W. Untersuchungen über den anatomischen bau des weizenblattes je nach der Höhe seines Standortes am Halme und unter dem einfluss äusserer Bedingungen. Kuhn Arch., 6:391. 1915
463. Hirano, E. Relative abundance of stomata in Citrus and some related genera. Botan. Gaz., 92:296-310. 1931
464. Hofler, R. Silbernitratreduktion der schliesszellen und öffnungszustand der stomata. Protoplasma, 33:253-274. 1939
465. Hofmann, K. Experimentell - ökologische untersuchungen an pflanzen auf dem Frauenstein bei Modling, mit besonderer berücksichtigung der transpiration. Beih. Bot. Centralbl. Abt. A., 55:212-270. 1936
466. Hohn, K., and G. Vollenweider. Beziehungen zwischen transpiration, guttation und wachstum bei Avena sativa. Beitr. Biol. Pflanzen, 35(1):41-53. 1959

467. Hohnel, F. v. Über die transpirationsgrosse der forstlichen Holzgewächse mit Beziehung auf die forstlich-meteorologischen Verhältnisse. Mitt. Forstl. Versuchswesen Österreichs, 2:47-90. 1881
468. ———. Weitere Untersuchungen über die transpirationsgrößen der forstlichen Holzgewächse. Mitt. Forstl. Versuchswesen Österreichs, 2:275-296. 1881
469. ———. Über den wasserverbrauch der Holzgewächse mit Beziehung auf die meteorologischen Faktoren. Mitt. Forstl. Versuchswesen Österreichs. N. F., 1:15-22. 1883
470. ———. Über das wasserbedurfnis der Walder. Cbl. Ges. Forstwesen, 10:384-409. 1884
471. Holdridge, L. R. Simple method for determining potential evapotranspiration from temperature data. Sci., 130(3375):572. 1959
472. Holz, W. Über den transpirationsverlauf abgeschnittener blätter. Angew. Bot., 17:349-373. 1935
473. Horsfall, J. G., and A. L. Harrison. Effect of bordeaux mixture and its various elements on transpiration. Jour. Agr. Res., 58:423-443. 1939
474. Howe, G. F. Time course of the photosynthetic induction periods and photosynthetic rhythms in certain higher plants as related to changes in degree of stomatal opening. Diss. Abs., 20(9):3486. 1960
475. Howes, F. Researches on the vegetation of Natal. Ser. I, Section II. A new calcium chloride method of measuring the resistance to water loss in leaves. Mem. Bot. Surv. So. Africa, 5:23-33. 1923
476. Huber, B. Transpiration in verschiedener Stammhöhe. I. Sequoia gigantea. Zeit. Bot., 15:465. 1923
477. ———. Die Beurteilung des wasserhaushaltes der pflanze. Jahrb. Wiss. Bot., 64:1-120. 1924
478. ———. Zur methodik der transpirationsbestimmung am standort. Ber. Deut. Bot. Ges., 45:611-618. 1927
479. ———. Zur physik der spalöffnungstranspiration. Ber. Deut. Bot. Ges., 46:610-625. 1928
480. ———. Untersuchungen über die Gesetze der Porenverdunstung. Zeit. Bot., 23:839-891. 1930

1. The first part of the paper discusses the importance of maintaining accurate records of all transactions.

2. It then goes on to describe the various methods used to collect and analyze data, including interviews, surveys, and focus groups.

3. The next section presents the results of the study, showing that there is a significant correlation between the use of records and the accuracy of financial reporting.

4. Finally, the paper concludes by offering several recommendations for improving record-keeping practices, such as implementing standardized procedures and providing training for staff.

5. In addition, the author suggests that future research should focus on developing more effective ways to monitor and evaluate the impact of record-keeping on organizational performance.

6. Overall, the paper provides a comprehensive overview of the current state of record-keeping research and offers valuable insights for practitioners and researchers alike.

7. The author also acknowledges the limitations of the study, noting that the sample size was relatively small and that the data were self-reported, which may have introduced some bias.

8. Despite these limitations, the findings of the study are promising and suggest that there is much to be gained from investing in record-keeping systems and processes.

9. The paper ends with a call to action, urging organizations to take steps to improve their record-keeping practices and to support ongoing research in this area.

10. Finally, the author expresses gratitude to the many individuals and organizations that supported the research and to the reviewers for their helpful comments and suggestions.

481. Huber, B. Die trockenangepassungen in der Wipfelregion der Bäume und ihre Bedeutung für das Xerophytenproblem. Jour. Ecol., 19:283-291. 1931
482. _____. Einige grundfragen des wärmehaushalts der pflanzen. I. Die ursache der hohen Stämmen-Temperaturen. Ber. Deut. Bot. Ges., 50:(68)-(76). 1932
483. _____. Referat über M. G. Stälfelt, der stomatäre regulator der pflanzlichen transpiration. Zeit. Bot., 26:186-190. 1933
484. _____. Der wärmehaushalt der pflanzen. Naturwiss. und Landwirt., 17:1-148. 1935
485. _____. Mikroklimatische und pflanzen-temperatur-registrierungen mit dem multithermographen von Hartmann und Braun. Jahrb. Wiss. Bot., 84:671-709. 1937
486. _____. Versuche zur messung des wasserdampf- und kohlendioxyd-austausches über pflanzenbeständen. Sitzungsber. Wien Akad. I, 155:97-145. 1947
487. _____. Registrierung des CO₂-gefälles und berechnung des CO₂-stromes über pflanzengesellschaften mittels ultrarotabsorptions-schreiber. Ber. Deut. Bot. Ges., 63:52-63. 1950
488. _____. Der einfluss der vegetation auf die schwankungen des CO₂-gehaltes der atmosphäre. Arch. Meteorol., 4:154-167. 1952
489. _____. Was wissen wir vom wasserverbrauch des waldes. Forstwiss. Gbl., 72:257-264. 1953
490. _____. Besprechung von Heath: The role of starch in the light response of stomata. Fortschr. Bot., 15:17. 1954
491. _____. Die evaporation. Encyc. Plant Physiol., 3:265-284. 1956
492. _____. Die transpiration von sprossachsen und anderen nicht foliosen Organen. Handbuch der Pflanzenphysiologie, 3:427-435. 1956
493. _____, and E. Schmidt. Weitere thermoelektrische untersuchungen über den transpirationsstrom der bäume. Thar. Forstl. Jahrb., 87:369-412. 1936
494. _____, and R. Miller. Methoden der wasserdampf- und transpirations-registrierung im laufenden luftstrom. Ber. Deut. Bot. Ges., 67:222-233. 1954

THE UNIVERSITY OF CHICAGO
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TO THE EDITOR OF THE JOURNAL OF THE AMERICAN CHEMICAL SOCIETY
FROM
DR. J. H. GOLDSTEIN
DEPARTMENT OF CHEMISTRY
UNIVERSITY OF CHICAGO
CHICAGO, ILLINOIS 60637
U.S.A.
RECEIVED MAY 15, 1967
SIR:
I have the honor to acknowledge the receipt of your letter of May 10, 1967, and to inform you that the manuscript has been forwarded to the appropriate reviewers for their consideration. I am sorry that I cannot give you a more definite answer at this time, but the reviewers' reports are being received and I am waiting for their recommendations. I will be glad to discuss the matter with you if you wish, and I will be sure to let you know as soon as a final decision has been reached. Very truly yours,
J. H. GOLDSTEIN
DEPARTMENT OF CHEMISTRY
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495. Huber, B., E. Kinder, E. Obmüller, and H. Ziegenspeck. Spaltöffnungs-Dünnschnitte im elektronenmikroskop. *Protoplasma*, 46:380-393. 1956
496. Hubner, G. Zum wassertransport in Vicia faba.. *Flora Allg. Bot. Zeit.*, 148(4):549-594. 1960
497. Humphries, E. C. The effects on rates of transpiration and absorption of small variations in the pressure in the xylem tracts. *Annals of Bot. N.S.* 2:665-679. 1938
498. Hungate, R. E. The cohesion theory of transpiration. *Plant Physiol.*, 9:783-794. 1934
499. Huser, W. Untersuchungen über die anatomie und wasserökologie einiger Ostseestrandpflanzen. *Planta*, 11:485-508. 1930
500. Hygen, G. Studies in plant transpiration. I. *Physiol. Plantarum*, 4:57-183. 1951
501. _____. Studies in plant transpiration II. *Physiol. Plantarum*, 6:106-133. 1953
502. _____. On the transpiration decline in excised plant samples. *Skrifter Norske Vidensk. - Akad. Skr. I, Oslo, Mat.-Naturv. Kl.* No. 1, 84 p. 1953
503. _____. The effect of wind on stomatal and cuticular transpiration. *Nyt. Mag. Botanikk, Oslo*, 3:83-94. 1954
504. _____, and E. Midgaard. A re-investigation of the influence of varying air humidity on cuticular transpiration in Pinus silvestries L. *Physiol. Plantarum*, 7:128-140. 1954
505. Hylmö, B. Transpiration and ion absorption. *Physiol. Plantarum*, 6:333-405. 1953
506. Ian, B. CH. The rate of transpiration of some species of Stipa lessingiana, Festuca sulcata, and Linosyris tartarica associations of the dry steppes of Central Kazakhstan. *Bot. Zhur. (Moskva)*, 44(12):1671-1680. 1959
507. Il'kun, H. M. Transpiration in one and two year old pines on the lower Dnieper sands. *Ukrain. Bot. Zhur.*, 14(3):84-90. 1957
508. Iljin, W. S. Transpirationsgany bei den getrauchten pflanzen. *Trav. Soc. Imp. Nat. St. Petersburg III, Sect. Bot.*, 42:357-414. 1911

1. The first part of the report deals with the general situation of the country and the progress of the work during the year.

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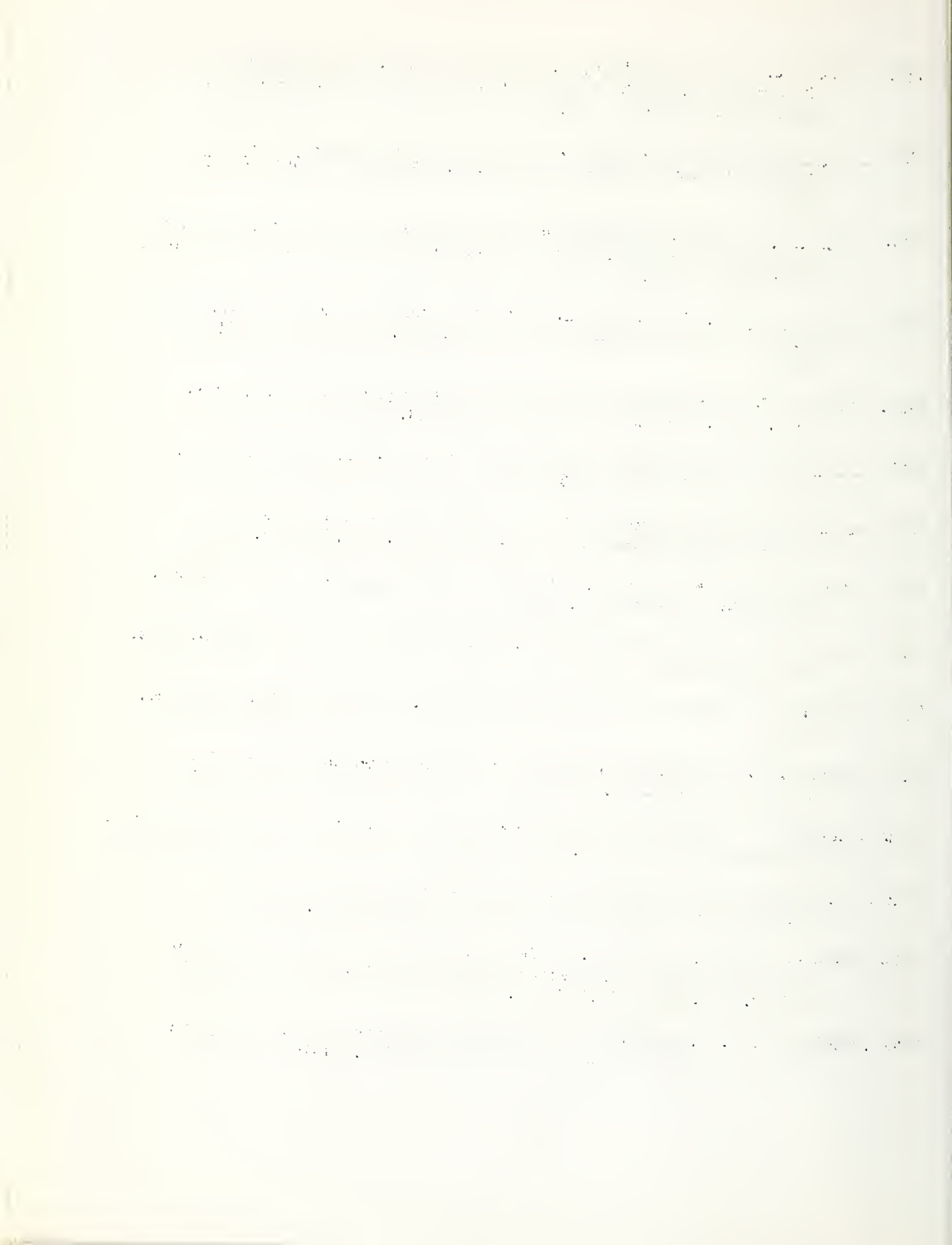
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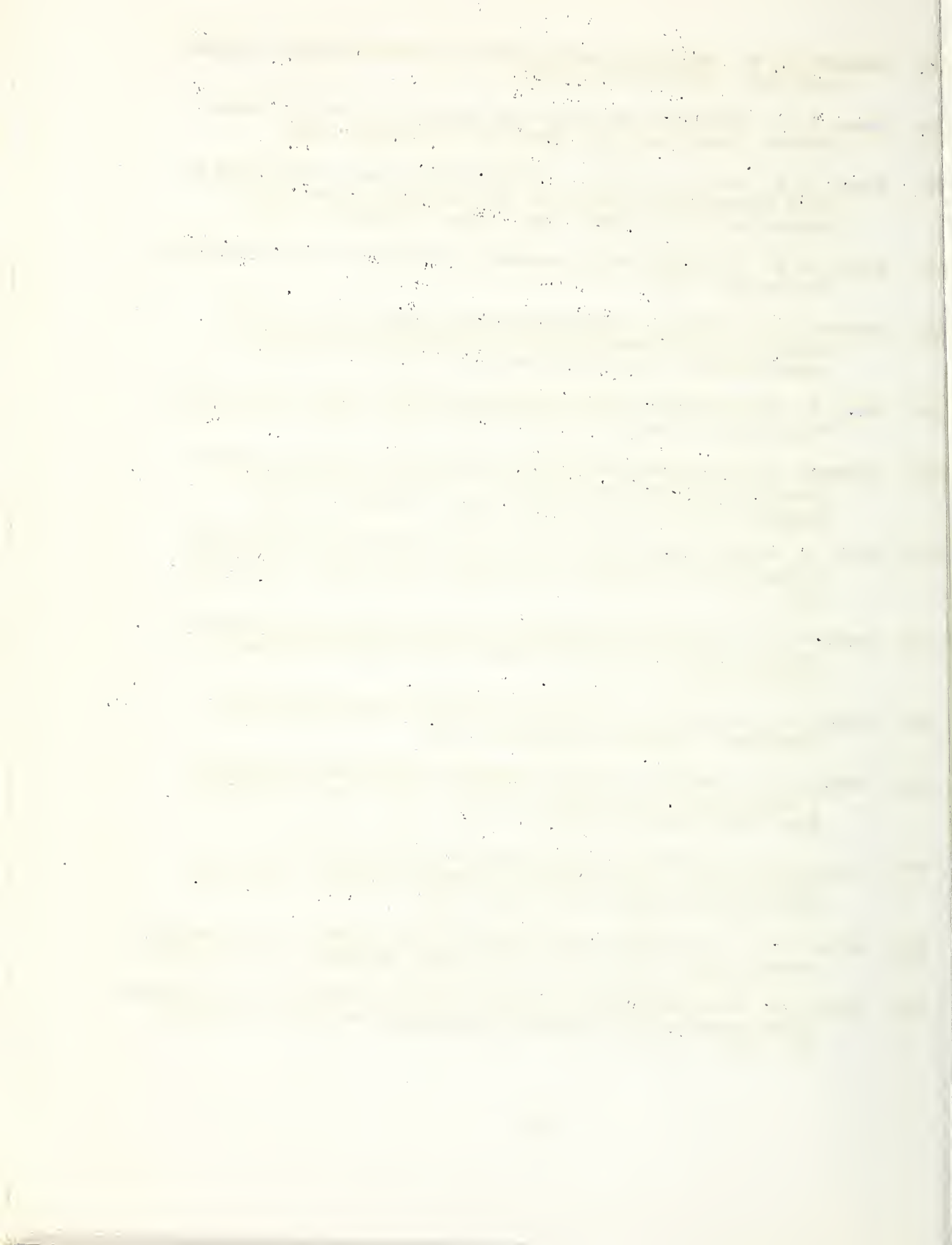
14. The fourteenth part of the report deals with the results of the work during the year and the progress of the work during the year.

509. Iljin, W. S. Die regulierung der spaltöffnungen im Zusammenhang mit Veränderung des osmotischen Druckes. Bot. Centr. Beih. Abt. I, 32:15-35. 1914
510. _____. Ueber den einfluss des welkens der pflanzen auf die regulierung der spaltöffnungen. Jahrb. Wiss. Bot., 61:670-697. 1922
511. _____. Die wirkung hochkonzentrierten Lösungen auf die Stärkebildung in den spaltöffnungen der pflanzen. Jahrb. Wiss. Bot., 61:698-712. 1922
512. _____. Wirkung der kationen von salzen auf den zerfall und die bildung von Stärke in der pflanze. Biochem. Zeit., 132:494. 1922
513. _____. L'influence de la sécheresse sur la regulation des stomates et sur l'accroissement des plantes. Preslia, 2:43-55. 1923
514. _____. Der einfluss des wassermangels auf die kohlenstoff-assimilation durch die pflanzen. Flora, 116:360-378. 1923
515. _____. Der einfluss des welkens auf den ab- und aufbau der Stärke in der pflanze. Planta, 10:170-184. 1930
516. _____. Über öffnen der stomata bei starkem welken der pflanzen. Jahrb. Wiss. Bot., 77:220-251. 1932
517. _____. Drought resistance in plants and physiological processes. Ann. Rev. Plant Physiol., 8:257-274. 1957
518. Imamura, S. Untersuchungen über den mechanismus der turgor-schwankung der spaltöffnungsschliesszellen. Jap. Jour. Bot., 12:251-346. 1943
519. Inamdar, R. S., and B. M. Dabral. Experiments on transpiration. Jour. Indian Bot. Soc., 9:1-30. 1930
520. Ivanov, L. A. The present state of the question of drought resistance. Bul. App. Bot. Plant Breeding, 13:1-32. 1923
521. _____, and A. A. Silina. An actino metric method of determining forest transpiration. Bot. Zhur., 36:517-522. 1921
522. _____, _____, and J. L. Tsel'niker. O metode bystrogo vzveshivaniia dlia opredeleniia transpiratsii v estestvennykh usloviakh. Bot. Zhur., 35:171-185. 1950

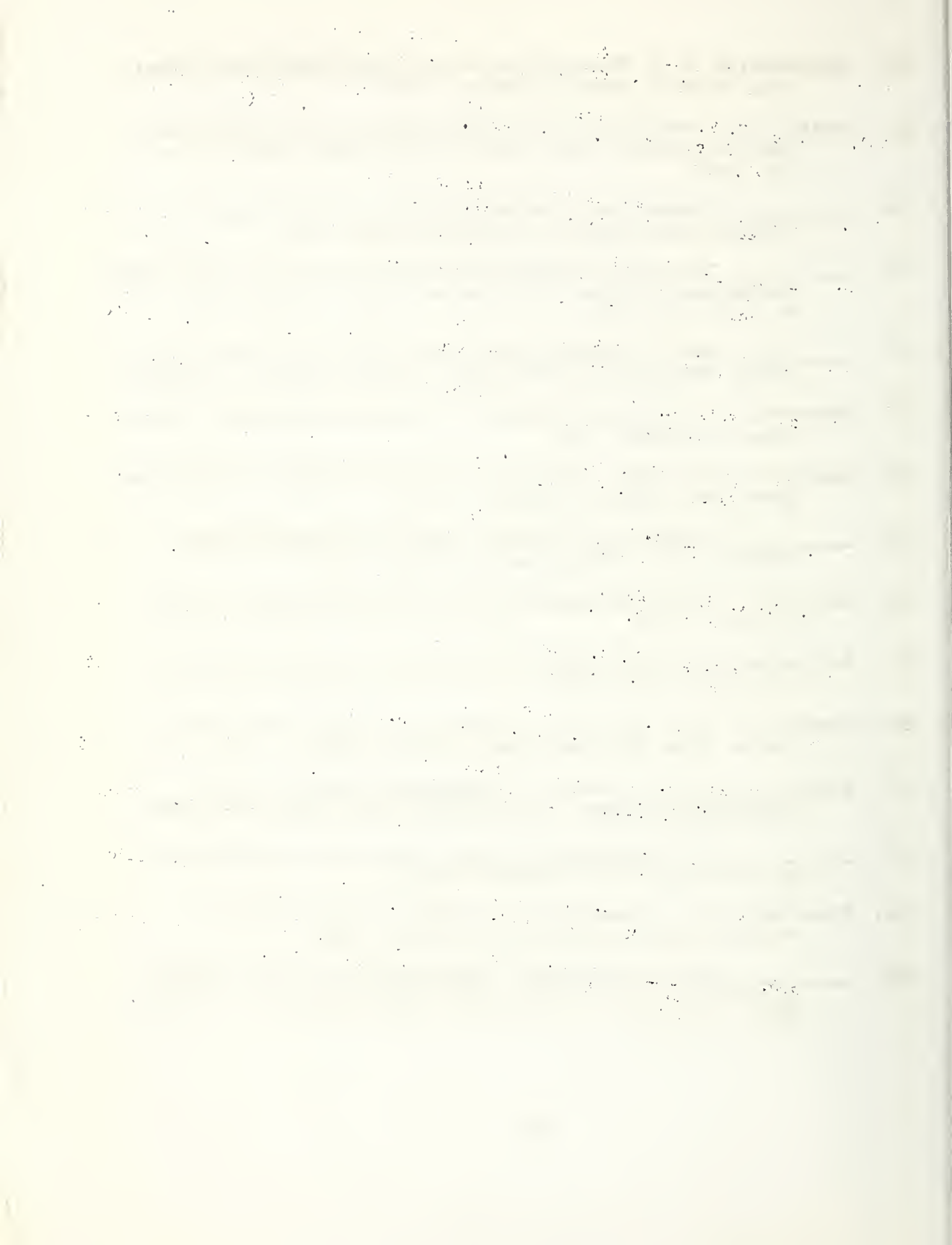
523. Ivanov, L. A., A. A. Silina, D. G. Zhmur, and J. L. Tselniker.
Determination of the transpiration capacity of forest cover.
Bot. Zhur., 36:5-20. 1951
524. _____, and A. A. Silina. Über die aktinometrische methode der
transpirationsbestimmung des waldes. Bot. Zhur., 36:517-522.
1951
525. _____, and M. M. Thielmann. Über den einfluss des lischtes ver-
schiedener Wellenlänge auf die transpiration der pflanzen. Flora,
116:296-311. 1923
526. _____, and M. F. Tilman. Sur l'influence de la composition de la
lumière sur la transpiration. Jour. Soc. Bot. Russe, 6:81-96.
1923
527. Iwanoff, L. Ueber die transpiration der holzgewächse im winter I.
Ber. Deut. Bot. Ges., 42:44-49, 210-213. 1924
528. _____, Zur methodik der transpirationbestimmung am standort.
Ber. Deut. Bot. Ges., 46:306-310. 1928
529. Jahnel, H. Untersuchungen über die elektrolytkonzentration des
transpirationsstromes. Jahrb. Wiss. Bot., 86:527-555. 1938
530. Janse, J. M. Der aufsteigende strom in der pflanze. Jahrb.
Wiss. Bot., 45:305-350. 1903
531. _____. Der aufsteigende strom in der pflanze. II. Jahrb. Wiss.
Bot., 52:509-602. 1913
532. Jeffreys, H. Some problems of evaporation. Phil. Mag. (6)35:270-280.
1918
533. Jensen, P. B. Studies on transpiration in high-moor plants. Bot.
Tidsskr., 36:144-154. 1917
534. Johansen, S. Effect of indole-acetic acid on stomata and photosynthesis.
Physiol. Plantarum, 7:531-537. 1954
535. Johansson, N. Ökologiske studien über den gasaustausch einiger
landpflanzen. Svensk. Bot. Tidsskr., 20:107-236. 1926
536. Johnston, C. O., and E. C. Miller. Relation of leaf-rust infection
to yield, growth, and water economy of two varieties of wheat.
Jour. Agr. Res., 49:955-981. 1934
537. Johnston, E. S. A method of studying the absorption-transpiration
ratio in nutrient media. Sci., 52:517-518. 1920



538. Johnston, R. D. Control of water movement by stem chilling. Austral. Jour. Bot., 7(2):97-108. 1959
539. Jones, I. D. Ultrapaque microscope equipment as an aid in stomatal studies. Proc. Amer. Soc. Hort. Sci., 29:78-79. 1932
540. Jones, T. N., and L. O. Palmer. Field curing of hay as influenced by plant physiological reactions. II. The role of leaves in the dehydration of hay plants. Agr. Engr., 14:156-158. 1933
541. Jones, W. N. A self-recording porometer and potometer. New Phytologist, 13:353-364. 1914
542. Kamalan, V. K. Studies in absorption and transpiration. IV. The effect of oxygen concentrations on absorption of water and transpiration. Jour. Indian Bot. Soc., 20:19-35. 1941
543. Kamp, H. Untersuchungen über kutikularbau und kutikulare transpiration von blättern. Jahrb. Wiss. Bot., 72:403-405. 1930
544. Katayama, Y. The chromosome number in Phaseolus and Allium, and an observation on the size of stomata in different species of Triticum. Jour. Sci. Agr. Soc. Japan, 303:52-54. 1928
545. Kate, T. On the transpiration peaks of some shoots appeared in the beginning of wind blow. Jap. Forestry Soc. Trans., 59:112-114. 1951
546. Kaufmann, K. Anatomie und physiologie der spaltöffnungs apparate mit verholzten schliesszellmembranen. Planta, Arch. Wiss. Bot., 3:27-59. 1927
547. Kausch, W., and H. Ehrig. Beziehungen Zwischen transpiration und Wurzelwerk. Planta, 53:434-448. 1959
548. Kekukh, A. M. Metodika i delaki rezul'tati vivchennia fotosintezu i transpiratsii v prirodnykh umovakh. Zhur. Inst. Bot. Akad. Nauk. URSR, 24:37-70. 1938
549. _____. K voprosu o svyazi protsessov assimiliatsii i transpiratsii u sel'skokhoziaistvennykh rastenii. Izv. Akad. Nauk. SSSR Ser. Biol. 1111-1120. 1938
550. Keller, B. A. O svyazi mezhdu ovshchei dlinoi zhilok i intensivnost'iu transpiratsii. Trudy Bot. Opytn. Stant. Vovonezh., 1:15-27. 1929
551. Keller, S. Über der wirkung chemischer faktoren auf die tagesperiodischen Blättbewegungen von Phaseolus multiflorus. Zeit. Bot., 48(1):32-57. 1960



552. Keller-Leslie, E. F. Transpiratsiia u razlichnykh modifikatsii' odnogo vida. Sovetsk. Botanika, 101-102. 1934
553. Kelley, V. W. The effect of oil sprays upon the transpiration of some deciduous fruits. Proc. Amer. Soc. Hort. Sci., 23(1926):321-325. 1927
554. _____. A comparison of the transpiration rates of twenty-one deciduous fruit species. Ill. Sta. Bul. 341. 1930
555. _____. The effect of pruning of excised shoots on the transpiration rate of some deciduous fruit species. Proc. Amer. Soc. Hort. Sci., 29:71-73. 1932
556. _____. Effect of certain hydrocarbon oils on the transpiration rate of some deciduous tree fruits. Ill. Sta. Bul. 353. 581-600.
557. Kemmerzell, A. Beiträge zur anatomie des durchluftungs-systems. Bot. Arch., 17:313-346. 1927
558. Kenda, G., and F. Weber. Stomata-zahl vergrünter blattaria-kronblätter. Österr. Bot. Ztschr., 97:503-509. 1950
559. _____, I. Thaler, and F. Weber. Schliesszellen-chloroplasten vergilben nicht. Protoplasma, 42:246-249. 1953
560. Kerl, H. W. Beitrag zur Kenntnis der spaltöffnungsbewegung. Planta, 9:407-463. 1930
561. Ketellapper, H. J. The mechanism of stomatal movement. Amer. Jour. Bot., 46:225-231. 1959
562. Khankoje, P. Some factors which influence the water requirement of plants. Jour. Amer. Soc. Agron., 6:1-23. 1914
563. Kiendl, J. Zum wasserhaushalt des Phragmetetum communis und des Glycerietum aquaticae. Ber. Deut. Bot. Ges., 66:247-263. 1953
564. _____. Zur transpirationsmessung an sump- und wasserpflanzen. Ber. Deut. Bot. Ges., 67:243-247. 1954
565. Kiesselbach, T. A. Transpiration as a factor in crop production. Neb. Agr. Expt. Sta. Res. Bul., 6, 214 p. 1916
566. _____, and A. M. Montgomery. The relation of climatic factors to the water used by the corn plant. Neb. Sta. Rept., 91-107. 1911



567. Killian, C. Recherches écologiques sur les fluctuations saisonnières de la transpiration chez les végétaux du climat Méditerranéen. Bu. Soc. Bot. France, 78:460-501. 1931
568. _____. Recherches écologiques sur les fluctuations saisonnières de la transpiration chez les végétaux du climat Méditerranéen. Bul. Soc. Bot. France, 79:185-220. 1932
569. Kindermann, V. Über die auffallende widerstandskraft der schliesszellen gegen schädliche einflüsse. Sitzungsab. Akad. Wiss. Wien, Math.-naturwiss. Kl. 3. 1902
570. Kiselev, N. Veränderung der durchlässigkeit des protoplasma der schliesszellen im zusammenhange mit stomatären bewegungen. Beih. Bot. Centralbl. Abt. I, 41:287-308. 1925
571. Kisselew, N. Ueber die transpiration welkender sonnen und schattenblätter. Beih. Bot. Centralbl. Abt. I, 44:181-217. 1927
572. Kittredge, J. Report of committee on transpiration and evaporation. Trans. Amer. Geophysic. Union, 22:906-915. 1941
573. Klein, K. Das spaltoffnungsverhalten dürreresistenter und dürrereempfindlicher sorten landwirtschaftlicher kulturpflanzen. Diss. Darmstadt. 1944.
574. Klemm, G. Untersuchungen über den transpirationswiderstand der Mesophyllmembranen und seine bedeutung als regulator für die stomatäre transpiration. Planta, 47:547-587. 1956
575. Knight, R. C. A convenient modification of the porometer. New Phytologist, 14:212-216. 1915
576. _____. On the use of the porometer in stomatal investigation. Annals of Bot., 30:57-76. 1916
577. _____. Recent work in transpiration. New Phytologist, 16:127-139. 1917
578. _____. The interrelations of stomatal aperture, leaf water-content, and transpiration rate. Annals of Bot., 31:221-240. 1917
579. _____. Relative transpiration as a measure of the intrinsic transpiring power of the plant. Annals of Bot., 31:351-359. 1917
580. _____. Further observations on the transpiration, stomata, leaf water-content, and wilting of plants. Annals of Bot., 36:361-383. 1922

581. Koch, W. Der tagesgang der "Produktivität der Transpiration." *Planta*, 48:418-452. 1957
582. Kohl, F. G. Die transpiration der pflanzen und ihre einwirkung auf die ausbildung pflanzlicher gewebe. Braunschweig. H. Bruhn, 1886
583. _____. Über assimilations-energie und spaltoffnungsmechanik. *Bot. Centralbl.*, 64:109-110. 1895
584. Koketsu, R. Variation of the transpiring power of leaves as related to the wilting of plants. *Jour. Dept. Agr., Kyushu Imperial Univ.*, 1:241-260. 1926
585. _____. Studies on the foliar transpiring power and its daily fluctuation as related to the development of leaves in Coleus blumei. *Bot. Mag. Tokyo*, 40:122-131. 1926
586. _____. Variation of the water content of leaves as related to the wilting of plants. *Jour. Dept. Agr., Kyushu Imperial Univ.*, 2:93-116. 1928
587. _____. Variation of the water content of leaves in relation to the wilting of plants. *Proc. Imp. Acad. Tokyo*, 4:229-230. 1928
588. _____, and S. Tsuruta. Anwendung der "pulver method" für vergleichende bestimmungen der transpirationsgrösse. *Bot. Mag. Tokyo*, 43:253-266. 1929
589. Kokina, S. I. Einwirkung des wassergehaltes im boden auf die intensität der transpiration und der assimilation der pflanzen. *Izv. Glavw. Bot. Sada SSSR*, 28:184-214. 1929
590. Kilkunov, V. V. (Inquiry into transpiration and drought resistance in cultivated plants.) *Jour. Landw. Wiss. Moskau*, 3:531-551. 1926
591. Kondo, J. N. The influence of external factors as well as stages of development on the resistance of plants to dehydration. *Bul. App. Bot. and Plant Breeding*, 27:129-156. 1931
592. Konis, E. The effect of leaf temperatures on transpiration. *Ecology*, 31:147-148. 1950
593. Konstantinov, P. N. Concerning transpiration in plants and their ability to withstand drought. *Jour. Landw. Wiss. Moskau*, 2: 405-414. 1925
594. Koriba, K. Ueber der konvektion und verdunstung abs physikalische komponente der transpiration. *Bot. Mag. Tokyo*, 51:461-472. 1937

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595. Koriba, K. Untersuchungen über die konvektion und verdunstung als physikalische komponente der transpiration. I. - VI. Bot. & Zool. (Tokyo), 5:1159-1164, 1443-1450, 1635-1642, 1839-1844, 1989-1994, 2137-2144. 1937.
596. _____. Untersuchungen über die konvektion und verdunstung als physikalische komponente der transpiration. VII. - X. Bot. & Zool. (Tokyo), 6:11-15, 363-371, 523-531, 683-692. 1938.
597. _____. Über die konvektion und verdunstung als physikalische grundlage der transpiration. Japan. Jour. Bot., 13:1-242. 1943.
598. Koritz, H. G., and F. W. Went. The physiological action of smog on plants. I. Initial growth and transpiration studies. Plant Physiol., 28:50-62. 1953.
599. Kosaka, H. Beziehungen zwischen den vegetationsorganen auftretenden farbstoffen und der transpiration bei einigen kulturpflanzen. Proc. Crop Sci. Soc. (Japan), 3:172-177. 1931.
600. _____. The relationship between different physiological aspects of plants and the appearance of pigments in the different parts of the plants. V. The relationship between the presence of anthocyanin pigments and transpiration in some cultivated plants. Jour. Dept. Agr., Kyushu Imperial Univ., 4:95-126. 1933.
601. Kosmat, H. Quellungserscheinungen an pflanzen. I. Kationeneinfluss auf spaltöffnungen. Landwirtsch. Jahrb., 92:523-592. 1943.
602. Kostytschew, S., K. Bazyrena, and W. Tschensnokov. Untersuchungen über die photosynthese der laubblätter unter natürlichen verhältnissen. Planta, 5:696-724. 1923.
603. Kozlowski, T. T. Transpiration rates of some forest tree species during the dormant season. Plant Physiol., 18:252-260. 1943.
604. Kramer, P. J. The intake of water through dead root systems and its relation to the problem of absorption by transpiring plants. Amer. Jour. Bot., 20:481-492. 1933.
605. _____. The relation between rate of transpiration and rate of absorption of water in plants. Amer. Jour. Bot., 24:10-15. 1937.

606. Kramer, P. J. Root resistance as a cause of the absorption lag. Amer. Jour. Bot. 25:110-113. 1938.
607. _____. The forces concerned in the intake of water by transpiring plants. Amer. Jour. Bot. 26:784-791. 1939.
608. _____. Plant and soil water relationships. McGraw-Hill, New York, Toronto, and London. 1949.
609. _____. Effects of wilting on the subsequent intake of water by plants. Amer. Jour. Bot. 37:280-284. 1950.
610. _____. Physical and physiological aspects of water absorption. Encyc. of Plant Physiol. 3:124-159. 1956.
611. _____, and T. S. Coile. An estimation of the volume of water made available by root extension. Plant Physiol. 15:743-747. 1940.
612. Krasnosel'sky-Maksimov, T. Zur methodik der bestimmung von assimilation und bewegungen der spaltöffnungen in natürlichen verhältnissen. Ber. Deut. Bot. Ges. 47:313-320. 1929.
613. Krasnosek'sky-Maksimov, T. and A. C. Ordojan. New methods for the study of photosynthesis and of stomatal movements. Trudy Prikl. Bot. Gen., Selek., 22(1):443-448. 1929.
614. Krausche, K. K., and B. E. Gilbert. Increase of transpiration rates of tomato leaves due to copper sprays. Plant Physiol. 12:853-860. 1937.
615. Krause, E. Haptotropismus und transpirationskrümmung bei keimlingen, ranken und anderen kontaktempfindlichen organen. Beit. Biol. Pflanz. Cohn., 24:150-190. 1936.
616. Krober, E. Ist die transpirationsgrösse der pflanzen ein masstab für ihre aubaufähigkeit? Kandw. Jahrb. bd. 24:503-587. 1895.
617. Kropfitch, M. UV-Bestrahlung und stomatazahl. Protoplasma, 40: 266-274. 1951.
618. Kruzhilin, A. S. and O. A. Zauralov. Transpiratsiya u zharoust oichivyykh sortov kaputsy. Akad. Nauk. SSSR Dok. 73:1295-1296. 1950.
619. Kuiper, P.J.C., and J. F. Bierhuizen. The effect of some environmental factors on the transpiration of plants under controlled conditions. Mededelingen Landbouwhogeschool, Wageningen, Nederland, 58(11), 1-6. 1958.

1. The first part of the report discusses the general situation of the country and the progress of the work during the year. It also mentions the results of the various committees and the work of the different departments.

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10. The tenth part of the report deals with the progress of the various committees and the work of the different departments. It mentions the results of the various committees and the work of the different departments.

620. Kümmler, A. Über die funktion der spaltoffnungen weissbunter blätter. Jahrb. Wiss. Bot., 61:610-669. 1922
621. Kusano, S. Transpiration of evergreen trees in winter. Jour. Coll. Sci., Imperial Univ. Tokyo, 15:313-366. 1901
622. Kuyper, J. Contributions to the physiology of stomata in Saccharum officinarum. Arch. Siukerindus. Nederland Indie, 23:1673-1700. 1915
623. Kuznetsova, E. Ueber die bearbeitung der transpiration sversuche. Zhur. Opytn. Agron. Ingo-Vast., 3:154-170. 1927
624. Lachenmeier, J. Transpiration und wasserabsorption intakter pflanzen nach vorausgegangener verdunkelung bei konstanz der lichtintensitat und der übrigen aussenfactoren. Jahrb. Wiss. Bot., 76:765-827. 1932
625. Laidlaw, C. G. P., and R. C. Knight. A description of a recording porometer and a note on stomatal behavior during wilting. Annals of Bot., 30:47-56. 1916
626. Lal, K. N., and O. N. Mehrotra. Studies in crop physiology: Cell-size characteristics of sugarcane varieties in relation to drought resistance. Botan. Gaz., 111:193-210. 1949
627. Lamour, J. On transpiration through leaf stomata. Phil. Mag. Jour. Sci., 6 ser., 35:350-352, 433-434. 1918
628. Lange, A. H., W. L. Ehrlert, and K. C. Hamner. Effect of environment on the uptake-transport of calcium and phosphorus by bean plants. Amer. Soc. Hort. Sci. Proc., 73:349-354. 1959
629. Lapin, V. K., and V. G. Telouch. Size and number of stomata in diploid and polyploid forms in Citrus, Poncirus and Fortunella. Compt. Rend. (Doklady) Acad. Sci., URSS, 27:365-368. 1940
630. LaRue, C. D. Simple weighing device for large-scale transpiration experiments. Botan. Gaz., 75:209-210. 1923
631. _____. The water supply of the epidermis of leaves. Pap. Mich. Acad. Sci., 13:131-139. 1930
632. Lausberg, T. Quantitative untersuchungen über die kutikuläre exkretion des laubblattes. Jahrb. Wiss. Bot., 81:769. 1935
633. Leclerc, A. De la transpiration chez les végétaux. Ann. Sci. Agron., 1:29-74. 1884

1. The first part of the report deals with the general situation of the country and the progress of the work during the year. It is divided into two main sections: the first section deals with the general situation of the country and the progress of the work during the year, and the second section deals with the specific results of the work.

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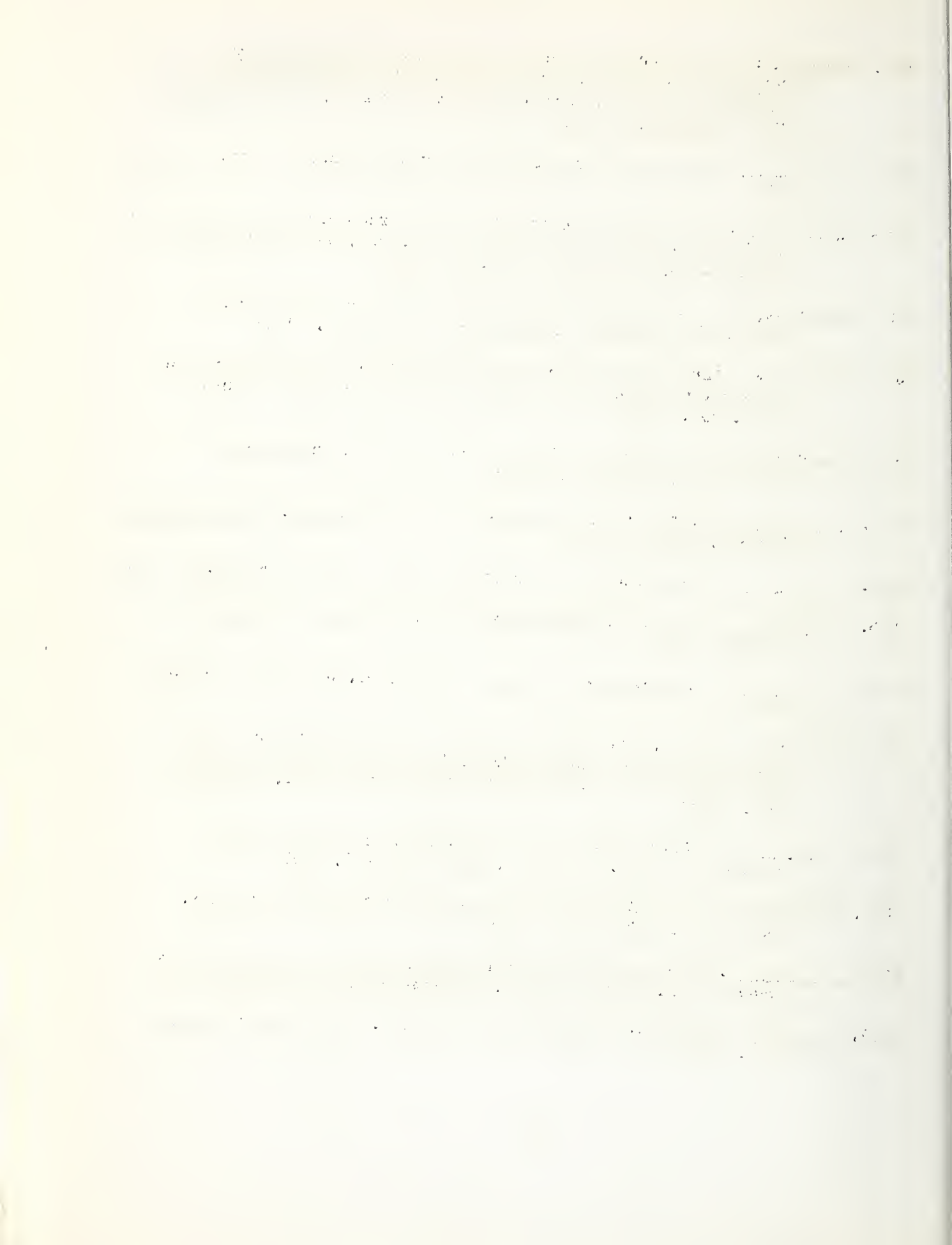
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5. The fifth part of the report deals with the general recommendations of the work. It is divided into two main sections: the first section deals with the general recommendations of the work, and the second section deals with the specific recommendations of the work.

634. Laemann, A. Le développement des stomates d'Iris germanica L.
Bul. Soc. Bot. Geneve II, 17:122-126. 1926
635. Leick, E. Über das verschiedenartige Verhalten der unterseitigen und oberseitigen stomata desselben blattes. Ber. Deut. Bot. Ges., 45:(28)-(42). 1927
636. _____. Ein neues Universal-Doppel-Porometer. Ber. Deut. Bot. Ges., 45:(43)-(59). 1927
637. _____. Untersuchungen über den einfluss des liches auf die öffnungsweite unterseitiger und oberseitiger stomata desselben blattes. Jahrb. Wiss. Bot., 67:771-847. 1927
638. _____. Bestimmung der transpiration und evaporation mit Rücksicht auf die Bedürfnisse der Ökologie. In E. Abderhalden. Handbuch der biologischen Arbeitsmethoden. Abt. XI, Part 4, 1573-1735. 1939
639. Leitgeb, H. Beiträge zur physiologie des spaltoöffnungsapparates. Mitt. Bot. Inst. Gruz, 1:125. 1888
640. Lemeé, G. Sur l'efficacité de l'enroulement des feuilles des Graminees contre la transpiration. Compt. Rend. Acad. Sci. Paris, 230:1201-1203. 1950
641. Leonov, K. D., and N. I. Sosedov. Observations upon daily movement of stomata. Biull. Sredne-Aziat. Gosudarstv. Univ. Tashkent. 8:71-77. 1925
642. Leonov, N. D. On the changes in stomatic apertures in mountain plants. Trans. Sci. Soc. Turkestan, 1:163-174. 1923
643. Lesage, P. Sur les rapports des palissades dans les feuilles avec la transpiration. C. R. Acad. Sci. Paris, 118:255-258. 1894
644. _____. Expériences utilisables en physiologie végétale sur l'osmose et sur l'aspiration du a l'évaporation. Compt. Rend. Acad. Sci., Paris, 171:353-360. 1920
645. Levitt, J. Frost, drought, and heat resistance. Ann. Rev. Plant Physiol., 2:245-268. 1951
646. _____. The physical nature of transpiration pull. Plant Physiol., 31:248-251. 1956
647. Lewis, F. J. Water movement in leaves. Farady Soc. Disc., 3:159-162. 1948

648. Leyerer, G. Die transpiration des besenginsters (Sarothamnus scoparius) im laufe des jahres unter besonderer berücksichtigung der durch den blattabwurf bewirktenveränderung. Staatsexamensarbeit Darmstadt. 1951
649. _____. Über die transpiration der rutengewächse. Diss. Darmstadt, 1956
650. _____. Der transpirationsanteil der verschiedenen sprossselemente von Sarothamnus scoparius (L.) Wimm. Flora, oder allgemeine botanische Zeitung, 146(3):361-377. 1960
651. Liebalddt, E. Einige beobachtungen über rhythmische fällungen in pflanzlichen gewebe. Protoplasma, 27:264-269. 1937
652. Liebig, M. Untersuchungen über die abhängigkeit der spaltweite der stomata von intensität und qualität der Strahlung. Planta, 33:206-257. 1942
653. Linsbauer, K. Beiträge zur Kenntnis der spaltöffnungsbewegung. Flora N. S., 9:100-143. 1916
654. _____. Ueber die physiologie der spaltöffnungen. Naturwissensch. 6:85-89, 97-101. 1918
655. _____. Beobachtungen an spaltöffnungen. Planta, 2:530-536. 1926
656. _____. Weitere beobachtungen an spaltöffnungen. Planta, 3: 527-561. 1927
657. _____. Histologisch notizen I. Ber Deut. Bot. Ges., 49:64-76. 1931
658. Liubins'kii, M. A. Novi dani do teorii i praktiki gorizonta'l'nogo porometra v aritlii zagal'nykh problem porometrichnoi metodiki. Zhur. Biobot. Tsiklu Vuan Vseukrains. Akad. Nauk., 2(7/8):67-104. 1933
659. _____. Nova ob'emovimna modifikatsiia gorizonta'l'nogo porometra. Zhur. Inst. Bot. VUAN, 12:75-83. 1935
660. Livingston, B. E. Relation of transpiration to growth in wheat. Botan. Gaz., 40:173-195. 1905
661. _____. The relation of desert plants to soil moisture and to evaporation. Carnegie Inst. Washington Publ. 50. 1906
662. _____. Relative transpiration in cacti. Plant World, 10:110-114. 1907



663. Livingston, B. E. Evaporation and plant development. *Plant World*, 10:269-276. 1907
664. _____. Evaporation and plant habitats. *Plant World*, 11:1-9. 1908
665. _____. A method for controlling plant moisture. *Plant World*, 11:39-40. 1908
666. _____. Stomata and transpiration in Tradescantia zebrina. *Sci.*, 29:269-270. 1909
667. _____. A rain-correcting atmometer for ecological instrumentation. *Plant World*, 13:79-82. 1910
668. _____. Operation of the porous cup atmometer. *Plant World*, 13:111-119. 1910
669. _____. A radio-atmometer for comparing light intensities. *Plant World*, 14:96-99. 1911
670. _____. A study of the relation between summer evaporation intensity and centers of plant distribution in the United States. *Plant World*, 14:205-222. 1911
671. _____. Paper atmometers for studies in evaporation and plant transpiration. *Plant World*, 14:281-289. 1911
672. _____. Light intensity and transpiration. *Botan. Gaz.*, 52:417-436. 1911
673. _____. The resistance offered by leaves to transpirational water loss. *Plant World*, 16:1-35. 1913
674. _____. Atmometry and the porous cup atmometer. *Plant World*, 18:21-30, 51-74, 95-111, 143-149. 1915
675. _____. Atmometric units. *Johns Hopkins Univ. Circ.*, 3:160-170. 1917
676. _____. Incipient drying and temporary and permanent wilting of plants, as related to external and internal conditions. *Johns Hopkins Univ. Circ.*, 293(N.S.3):176-182. 1917
677. _____. Studies upon the influence of solar radiation on the rate of transpirational water-loss from plants. *Carnegie Inst. Wash. Yearbook*. 22:288-289. 1923

1. The first part of the paper discusses the importance of maintaining accurate records of all transactions. It emphasizes that proper record-keeping is essential for the success of any business or organization. The author provides several examples of how poor record-keeping can lead to financial loss and legal complications.

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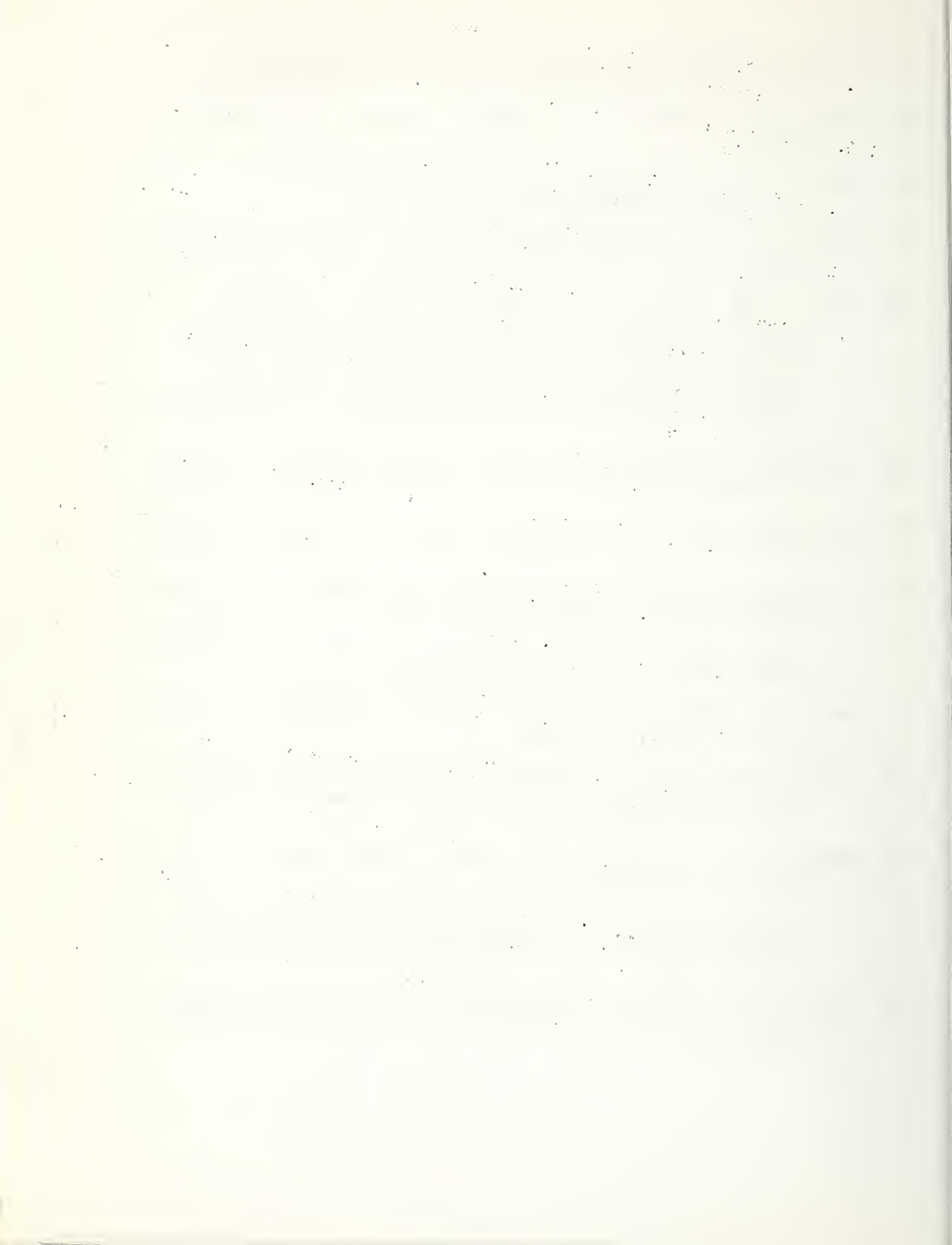
10. The tenth part of the paper discusses the various methods used to collect and analyze data. It compares different statistical techniques and discusses their strengths and weaknesses. The author also provides a detailed explanation of how to interpret the results of a data analysis.

678. Livingston, B. E. Plant water relations. Quart. Rev. Biol., 2:494-515. 1927
679. _____. Foliar transpiring power: Its estimation by means of standardized hygrometric paper slips. Bot. Mag. Tokyo, 51:407-425. 1937
680. _____, and W. H. Brown. Relation of the daily march of transpiration to variations in the water content of foliage leaves. Botan. Gaz., 53:309-330. 1912
681. _____, and A. H. Estabrook. Observations on the degree of stomatal movement in certain plants. Bul. Torrey Bot. Club, 39:15-22. 1912
682. _____, and L. A. Hawkins. The water relation between plant and soil. Carnegie Inst. Wash. Pub., 204. 1915
683. _____, and A. Hopping. Permanent standardization of cobalt chloride paper for use in measuring the transpiring power of plant surfaces. Carnegie Inst. Wash. Yearbook 13. 1914
684. _____, and R. Koketsu. The water supplying power of the soil as related to the wilting of plants. Soil Sci., 9:469-485. 1920
685. _____, and W. L. Norem. Water-supplying power and water-absorbing power of soils as related to wilting of wheat and coleus in greenhouse pot cultures. Soil Sci., 43:177-204. 1937
686. _____, and E. B. Shreve. Improvements in the method for determining the transpiring power of plant surfaces by hygrometric paper. Plant World, 19:287-309. 1916
687. _____, and J. D. Wilson. A black collodion coating for atmometer spheres. Sci., 63:362-363. 1926
688. Lloyd, F. E. Stomata as regulators of transpiration. Plant World, 11:131-138. 1908
689. _____. The physiology of stomata. Carnegie Inst. Wash. Pub., 82:1-142. 1908
690. _____. The relation of transpiration and stomatal movements to the water content of the leaves in Fouquieria splendens. Plant World, 15:1-14. 1912
691. _____. Leaf water and stomatal movement in Gossypium and a method of direct visual observation of stomata in vitro. Bul. Torrey Bot. Club, 40:1. 1913

692. Loftfield, J. V. G. The behavior of stomata. Carnegie Inst. Wash. Pub. 314:1-104. 1921
693. Long, F. L. Stomata which show functional movement for a century. Sci., 69:218-219. 1928
694. _____, and F. E. Clements. The method of collodion films for stomata. Amer. Jour. Bot., 21:7-17. 1934
695. Lott, R. V., and H. W. LeMert. A simple device for use in leaf area studies. Proc. Amer. Soc. Hort. Sci., 29:83-84. 1932
696. Loustalot, A. J. Influence of soil moisture conditions on apparent photosynthesis and transpiration of pecan leaves. Jour. Agr. Res., 71:519-532. 1945
697. Ludin, H. Untersuchungen über die transpiration von sonnen- und schattenpflanzen. Verh. Naturf. Ges. Basel, 39:176-215. 1929
698. Lyshede, J. M. Evapotranspiration from areas in North Seeland. Acad. Tech. Sci., Copenhagen, 17:59-63. 1952
699. Maass, W. Untersuchungen über die transpiratorische Leistung und den anatomischen bau normaler und lahiniater blätter der gleichen Art. Diss. Greifswald. 1939
700. MacDougal, D. T. A new hygrometer suitable for testing action of stomata. Torrey, 1:16-19. 1901
701. MacLeod, A. M. The significance of the distribution of stomata on the leaves of the genus Primula. Trans. Bot. Soc. Edinburgh, 33(1939/40):12-20. 1940
702. Maeda, S., and H. Kojima. Effect of light upon the foliar absorption, especially the infiltration of solution through stomata into the intercellular space. Kyushu Univ. Fac. Agr. Sci. B. 17(2):91-97. 1959
703. Magness, J. R., and J. R. Furr. Stomatal activity in apple leaves. Proc. Amer. Soc. Hort. Sci., 27:207-211. 1930
704. Mahlike, J. Wasserhaushalt und transpirationintensitat im Rahmen der Anwelkmethode. In Die Anwelkmethode im Dienste des Landbaues. Berlin. Deut. Verlag der Wiss. 1955
705. Maksimov, N. A. Recherches sur la transpiration des plantes xérophytes comparées a celle des mesóphytes. Zhur. Russk. Bot. Obshch., 1:56-75. 1916

706. Marcu, G. Comparative investigations on the transpirations of some Quercus species. Rev. Padurilor 75(1):20-22. 1960
707. Mariana, G. The influence of humidity on the formation and development of stomata. Att. Inst. Bot. Univ. Pavia, 2 ser. 8:32. 1902
708. Marshall, R. E. An apparatus for the ready determination of areas of compound leaves. Jour. Agr. Res., 47:437-439. 1933
709. Martin, E. V. Effect of solar radiation on transpiration of Helianthus annuus. Plant Physiol., 10:341-354. 1935
710. _____. Effect of soil moisture on growth and transpiration of Helianthus annuus. Plant Physiol., 15:449-466. 1940
711. _____. Studies of evaporation and transpiration under controlled conditions. Carnegie Inst. Wash. Pub. 550. 1943
712. _____, and F. E. Clements. Studies of the effect of artificial wind on growth and transpiration in Helianthus annuus. Plant Physiol., 10:613-636. 1935
713. Martin, J. H. The comparative drought resistance of sorghums and corn. Jour. Amer. Soc. Agron., 22:993-1003. 1930
714. Martin, W. H. Influence of Bordeaux mixture on the rates of transpiration from abscised leaves and from potted plants. Jour. Agr. Res., 7:529-548. 1916
715. _____, and E. S. Clark. Influence of Bordeaux mixture on transpiration. Ann. Rept. New Jersey Agr. Expt. Sta., 50(1928/29): 249-255. 1929
716. Maskell, E. J. Experimental researches on vegetable assimilation and respiration. XVII. The diurnal rhythm of assimilation in leaves of Cherry Laurel at "limiting" concentrations of carbon dioxide. Proc. Roy. Soc. B, 102:467-487. 1928
717. _____. Experimental research on vegetable assimilation and respiration. XVIII. The relation between stomatal opening and assimilation -- a critical study of assimilation rates and porometer rates in Cherry Laurel. Proc. Roy. Soc. B, 102:488-533. 1928
718. Masure, F. Observations sur la transpiration des plantes de grande culture. Mém. Soc. Agr. Sci. Belles-Lett. & Arts, Orléans, 28:5-166. 1888

719. Mateo, R. Genesis de los estomas del cordobán *Rhoeo discolor*.
Agrotecnia, 4:25-28. 1950
720. Mateo y Oms, R. Estudio de los estomas. Agrotecnia, 3(6):90-94.
1949
721. Mather, J. R. The measurement of potential evapotranspiration.
Climatology 7, Seebrook, N. J., 1-225. 1954
722. Mathiesen, A. Die geschwindigkeit und der verlauf des transpirations-
stromes bei der birke. Sweden, Skogshogsk. Skr., 5/6:10-24. 1951
723. Maue, W. Ist es bei unseren kulturgräsern möglich, aus einem
pflanzenbestunde die hinsichtlich den transpiration wichtigen
varianten herauszufinden, und kann das transpiration
vermögensverhältnis etwas über den relativen xerophytismus und
hygrophytismus aussagen? Ein beitrag zu den problem des
vergleichenden studiums der pflanzentranspiration. Angew. Bot.,
9:138-187. 1927
724. Maximow, N. The physiological basis of drought resistance of plants.
Eng. Abst., 1925.
725. _____. The plant in relation to water. Allen and Unwin, London.
1929
726. _____, and V. Rybin. Non-stomatal regulation of transpiration.
Jour. Russ. Bot. Congress, 1:25-26. 1921
727. _____, and L. K. Zernova. Behavior of stomata of irrigated wheat
plants. Plant Physiol., 11:651-654. 1936
728. Maxwell, W. Bodenausdunstung und pflanzen-transpiration. Landw. Vers.
Stat. bd. 51:205-220. 1899
729. McGinnis, H. A., and W. B. McDougall. A comparison of the transpiration
rates of corn and certain common weeds. Trans. Illinois State
Acad. Sci., 16:82-88. 1923
730. McLean, F. T. The permeability of citrus leaves to water. Philipp.
Jour. Sci., 19:115-123. 1921
731. _____. A study of the structure of the stomata of two species
of Citrus in relation to citrus canker. Bul. Torrey Club, 48:
101-106. 1921
732. McLean, R. C., and L. R. Hutchings. Streamline flow and the movement
of solutes in the transpiration stream. Plant Physiol., 10:773-
780. 1935



733. McManamin, J. P. Observations on the stomatal structure of Ilex Opaca. Ind. Acad. Sci. Proc., 52:58-61. 1943
734. Meidner, H. Changes in the resistance of the mesophyll tissue with changes in the leaf water content. Jour. Exptl. Bot., 6:94-99. 1955
735. _____. The determination of paths of air movement in leaves. Physiol. Plantarum, 8:930-935. 1955
736. _____, and O. V. S. Heath. Studies in stomatal behavior. VIII. Stomatal responses to temperature and carbon dioxide concentration in Allium cepa L., and their relevance to mid-day closure. Jour. Exptl. Biol., 10(29):206-219. 1959
737. _____, and D. C. Spanner. The differential transpiration porometer. Jour. Exptl. Bot., (in press).
738. Mendel, K. Orange leaf transpiration under orchard conditions. Part II. Soil moisture content decreasing. Palestine Jour. Bot. Rehovot Ser. 5:59-85. 1945
739. Mendiola, N. B. Effect of different rates of transpiration on the dry weight and ash content of the tobacco plant. Philipp. Jour. Sci., 20:639-655. 1922
740. Mer, C. L. The factors determining the resistance to the movement of water in the leaf. Annals of Bot. N. S., 4:397-401. 1940
741. _____. The functional significance of vascular anastomoses in determining the water supply to leaves in Eupatorium adenophorum. Annals of Bot. N. S., 12:169-182. 1948
742. Meyer, B. S. The measurement of the rate of water-vapor loss from leaves under standard conditions. Amer. Jour. Bot., 14:582-591. 1927
743. _____. Effects of mineral salts upon the transpiration and water requirement of the cotton plant. Amer. Jour. Bot., 18:79-93. 1931
744. _____. The daily periodicity of transpiration in the tulip poplar. (Liriodendron tulipifera). Ohio Jour. Sci., 32:104-114. 1932
745. _____. The hydrodynamic system. Encyc. Plant Physiol., 3:596-614. 1956

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95. 1. 1942

96. 1. 1942

97. 1. 1942

98. 1. 1942

99. 1. 1942

100. 1. 1942

746. Meyer, F. J. Kin neues objekt für die demonstration des transpirationstromes und der wirkungs weiss der leitbündelverbindungen. *Planta Arch. Wiss. Bot.*, 22:567-572. 1934
747. Michaelis, P. Okologische studien an der alpinen Baumgrenze. IV. Zur Kenntniss des winterlichen wasserhaushaltes. *Jahrb. Wiss. Bot.*, 80:169-247. 1934
748. Migahid, A. M., and F. A. Amer. Three types of transpiration curves. *Proc. Egypt. Acad. Sci.*, 7:92-113. 1951
749. Miller, E. C. Comparative study of the root systems and leaf areas of the corn and the sorghums. *Jour. Agr. Res.*, 6:311-333. 1916
750. _____. Relative water requirement of corn and the sorghums. *Jour. Agr. Res.*, 6:473-485. 1916
751. _____. Daily variation of water and dry matter in the leaves of corn and the sorghums. *Jour. Agr. Res.*, 10:11-47. 1917
752. _____. *Plant Physiology*. McGraw-Hill, New York. 1938
753. _____, and W. B. Coffman. Comparative transpiration of corn and the sorghums. *Jour. Agr. Res.*, 13:579-605. 1918
754. _____, and A. R. Saunders. Some observations on the temperature of the leaves of crop plants. *Jour. Agr. Res.*, 26:15-43. 1923
755. Miller, P. W., and C. E. Schuster. Transpiration responses with Persian walnuts and filberts sprayed with Bordeaux mixture. *Jour. Agr. Res.*, 71:465-469. 1945
756. Milthorpe, F. L. The significance of the measurement made by the cobalt chloride paper method. *Jour. Exptl. Bot.*, 6:17-19. 1955
757. _____, and E. J. Spencer. Experimental studies of the factors controlling transpiration. III. The interrelations between transpiration rate, stomatal movement, and leaf water content. *Jour. Exptl. Bot.*, 8:414-437. 1957
758. Minch, G. Beiträge zur kenntnis der wasseraufnahme transpirirender landpflanzen mit besonderer berücksichtigung der immergrünen gewächse. Erlangen, G., Vollrath. 1900
759. Minckler, L. S. A new method of measuring transpiration. *Jour. Forestry*, 34:36-39. 1936

1. The first part of the paper discusses the importance of maintaining accurate records of all transactions. It emphasizes that proper record-keeping is essential for the success of any business or organization. The author provides a detailed overview of the various methods used to collect and analyze data, highlighting the strengths and weaknesses of each approach. The discussion is supported by numerous examples and case studies, which illustrate the practical application of the concepts being presented.

2. The second part of the paper focuses on the challenges faced by researchers in this field. It identifies several key areas where further research is needed, including the development of more sophisticated statistical models and the integration of qualitative and quantitative data. The author also discusses the importance of collaboration between different disciplines, such as economics, sociology, and psychology, in addressing these complex issues. The paper concludes with a series of recommendations for future research, which are designed to guide the work of other scholars in the field.

3. The third part of the paper provides a comprehensive review of the existing literature on the topic. It begins by outlining the major theories and models that have been developed over the years, and then proceeds to evaluate the evidence supporting each of them. The author also identifies some of the most significant gaps in the current knowledge base, and suggests ways in which these gaps might be filled. The review is presented in a clear and concise manner, making it an excellent resource for anyone interested in the subject.

4. The fourth part of the paper discusses the implications of the findings for policy and practice. It examines the ways in which the research can be used to inform decision-making at the organizational level, and also considers the broader social and economic implications of the work. The author provides a series of practical suggestions for how the findings can be applied in the real world, and also discusses some of the potential risks and limitations of these applications. The paper ends with a final summary of the key points, and a call to action for the research community to continue to work on these important issues.

760. Minod, M. Deux instruments nouveaux destinés à la mesure de la transpiration des végétaux. Bul. Soc. Bot. Genève II, 23:460-465. 1931
761. Mitchell, J. W. Measurement of the area of attached and detached leaves. Sci., 83:334-336. 1936
762. _____. Effect of atmospheric humidity on rate of carbon fixation by plants. Botan. Gaz., 98:87-104. 1936
763. Mittmeyer, G. Studien über die abhängigkeit der transpiration verschiedener blattzipen vom licht und sättigungsdefizit der luft. Jahrb. Wiss. Bot., 74:364-428. 1931
764. Molisch, H. Das offen- und geschlossenein der spaltoffnungen, veranschaulicht durch eine neue methode (infiltrationsmethode). Zeit. Bot., 4:106-122. 1912
765. _____. Ueber den einfluss der transpiration auf das verschwinden der stärke in den blättern. Ber. Deut. Bot. Ges., 39:339-344. 1921
766. Molotkovskii, G. Kh. Kamera dlia gigroskopichskoi kobal'tovogo metoda ucheta transpiratsii. Dokl. Akad. Nauk. SSSR, 1935(1):338-341. 1935
767. _____. Das studium des zustandes der spaltoffnungen nach der methode der zelluloidabdrucke. Compt. Rend. (Doklady) Acad. Sci. URSS, 1935(3):417-418. 1935
768. _____. Modifikatsiia porometra naita. Bot. Zhur. SSSR, 20: 670-678. 1935
769. Montasir, A. H., and A. M. Migahid. Transpiration and stomata in desert plants. Bul. Fac. Sci., Egypt. Univ. Cairo, No. 1, 33 p. 1934
770. _____. On the rate of transpiration in plants. Bul. Inst. Egypt, 29:397-440. 1948
771. _____, and M. Shafey. Transpiration and stomatal frequency in Fagonia arabica L. Bul. Inst. Egypt, 35:251-279. 1953
772. Montemartini, L. Intorno all'azione della luce e di eccitanti chimici sopra la transpirazione. Lavori R. Inst. Bot. Palermo, 3:3-15. 1932

773. Montermoso, J. C., and A. R. Davis. Preliminary investigation of the rhythmic fluctuations in transpiration under constant environmental conditions. *Plant Physiol.*, 17:473-480. 1942
774. Montfort, C. Der einfluss ausgeglichener salzlosungen auf mesophyll- und schliesszellen. *Jahrb. Wiss. Bot.*, 65:502-. 1926
775. Monzi, M. Beeinflussung der spaltoffnungsweite durch regenfall. *Japan. Jour. Bot.*, 9:131-144. 1938
776. _____. Beeinflussung der spaltoffnungsweite durch plötzliches wassersperrern und zuführen, mit besonderer Berücksichtigung der spaltoffnungsbewegungen zur Regenzeit. *Japan. Jour. Bot.*, 9: 313-334. 1938
777. _____. Eine theoretische betrachtung über die infiltrationsmethode. *Bot. Mag. Tokyo*, 52:300-311. 1938
778. _____. Die mitwirkung der stomata-nebenzellen auf die spaltoffnungsbewegung. *Japan. Jour. Bot.*, 9:373-394. 1939
779. Morello, J. Transpiracion y balance de agua de la bananera en las condiciones de la ciudad de São Paulo. *Bol. Fac. Fil. Cién. e Letras Univ. São Paulo, Botânica*. No. 10. 1953
780. _____. Cuanta agua transpiran las plantas? *Ciencia e Investigacion*, 9:51-60. 1953
781. Morris, L. G. A recording weighing machine for the measurement of evapotranspiration and dewfall. *Jour. Agr. Engin. Res.*, 4(2): 161-173. 1959
782. Morton, A. G., and D. J. Watson. A physiological study of leaf growth. *Annals of Bot. N. S.*, 12:281-310. 1948
783. Moss, D. N., R. B. Musgrave, and E. R. Lemon. Photosynthesis under field conditions. III. Some effects of light, carbon dioxide, temperature, and soil moisture on photosynthesis, respiration, and transpiration of corn. *Agron. Abs.*, 73. 1959
784. Mothes, K. Ernährung, Struktur, und Transpiration. *Biol. Zentralbl.*, 52:193. 1932
785. Mouravieff, M. I. Action de l'hydratation des cellules épidermiques sur l'appareil stomatique. *Compt. Rend. Acad. Sci., Paris*, 232: 1507-1509. 1951

786. Mouravieff, I. Sur la tension de succion des cellules stomatiques et épidermiques. Akad. des Sci. Compt. Rend., 234:131-132. 1952
787. _____. L'ouverture des stomates dans les solutions acides par imbibition protoplasmique. Bul. Soc. Bot. France, 101:133-136. 1954
788. _____. Action du CO₂ et de la lumière sur le stomate séparé du mésophylle. I. Expériences avec les stomates maintenus sur l'eau distillée. Bul. Soc. Bot. France, 102:296-301. 1955
789. _____. Action du CO₂ et de la lumière sur l'appareil stomatique séparé du mésophylle. II. Expériences avec les stomates maintenus sur les milieux complexes. Botaniste (Paris), 11:195-212. 1956
790. _____. Action de la lumière sur la cellule végétale. I. Production du mouvement d'ouverture stomatique par la lumière des diverses régions du spectre. Soc. Bot. France B, 105(9/10):467-475. 1958
791. _____. Action de l'azoture de sodium sur les mouvements d'ouverture et de fermeture des stomates. Acad. Sci. Compt. Rend., 248(23):3336-3337. 1959
792. Mozhaeva, L. A., M. Khuan, and L. A. Siniou-Khina. Effect of hetero-auxin on transpiration in plants. Moskov. Ordena Lenina Sel'skokhoz. im K. A. Timiriàzeva. Dok. TSKHA, 39:209-215. 1958
793. Muenscher, W. L. C. A study of the relation of transpiration to the size and number of the stomata. Amer. Jour. Bot., 2:487-504. 1915
794. _____. Effect of transpiration on the absorption of salts by plants. Amer. Jour. Bot., 9:311-330. 1922
795. Müller, H. Untersuchungen über den transpirationsanstieg bei welkenden Blättern von Coleus. Angew. Bot., 19:309. 1937
796. Mundorf, A. Ein neuer reromorpher spaltoffnungsapparat bei den dicotyledondn. Oesterr. Bot. Zeit., 71:50-54. 1922
797. Nadel, M. On the influence of various liquid fixatives on stomatal behaviour. Palestine Jour. Bot. Hort. Sci., 1:22-42. 1935
798. _____. Sur la mesure de l'ouverture des stomates. Palestine Jour. Bot., Rehovot Ser., 3:2-64. 1940
799. Nagai, S. On the effect of stomata in the transpiration of sweet potato leaf. Botan. Mag. (Tokyo) 65:168. 1952
800. _____. Some osmotic and mechanical relations in the stomata of Commelina communis. Jour. Inst. Polytechnics, Osaka City Univ. 4:27-34. 1953

1. The first part of the document discusses the importance of maintaining accurate records of all transactions and activities. It emphasizes the need for transparency and accountability in financial reporting.

2. The second part of the document outlines the various methods and techniques used to collect and analyze data. It includes a detailed description of the experimental procedures and the statistical analysis performed.

3. The third part of the document presents the results of the study. It includes a series of tables and graphs that illustrate the findings of the research. The data shows a clear trend of increasing activity over time.

4. The fourth part of the document discusses the implications of the findings. It suggests that the results have significant implications for the field of study and may lead to further research in this area.

5. The fifth part of the document concludes the study. It summarizes the key findings and provides a final statement on the importance of the research.

6. The sixth part of the document includes a list of references to the sources used in the study. It also includes a list of figures and tables that are included in the document.

7. The seventh part of the document includes a list of appendices. These appendices provide additional information and data that are not included in the main body of the document.

8. The eighth part of the document includes a list of footnotes. These footnotes provide additional information and clarification on the content of the document.

9. The ninth part of the document includes a list of acknowledgments. These acknowledgments thank the individuals and organizations that provided support and assistance during the study.

10. The tenth part of the document includes a list of contact information. This information provides a way for others to reach out to the author for more information or to request a copy of the document.

801. Nakamura, T., and H. Takeshita. On the change of transpiration at the time of the solar eclipse. Soc. Agr. Met. Japan. Jour. Agr. Met., 5:26. 1949
802. Nakayama, M., and M. Kadota. The wind influence on the transpiration of some trees. Bul. Physiograph. Sci. Res. Inst. Tokyo Univ., 1:17-34. 1948
803. _____, and _____. The influence of the wind on the transpiration of some trees. II. The difference in the amounts of transpiration of pine leaves by length of wind durations. Bul. Physiograph. Sci., Res. Inst. Tokyo Univ., 10-17. 1949
804. Naugol'nykh, V. Zur frage über die transpiration einiger holzarten (Vorläufigerbericht). Izv. Saratovsk-Obshch. Estesvoispyt. 3:1-17. 1929
805. Neger, F. W. Die Wegsamkeit der laubblätter für gase. Flora, 111/112: 152-161. 1918
806. Negisi, K., and T. Satoo. The effect of drying of soil on apparent photosynthesis, transpiration, carbohydrate reserves, and growth of seedlings of Akamatu (Pinus densiflora Sieb. et Zucc.). Jour. Jap. Forest. Soc., 36:66-71. 1954
807. Neubauer, H. F. Transpiration und struktur. Biol. Zentralbl., 57: 82-100. 1937
808. Newton, J. D. The relation of the salt concentration of the culture solution to transpiration and root respiration. Sci. Agr., 5: 318-320. 1925
809. Newton, R. G. An improved electrical conductivity method for the estimation of carbon dioxide and other reactive gases. Annals of Bot., 49:381-398. 1935
810. Newton, R., and W. M. Martin. Physico-chemical studies on the nature of drought resistance in crop plants. Can. Jour. Res., 3:336-383, 385-427. 1930
811. Nichols, G. E. A simple revolving table for standardizing porous cup atmometers. Botan. Gaz., 55:249-251. 1913
812. Niemann, W. Über beziehungen zwischen blattgrosse und spaltöffnungs-zahl in abhangingkeit von der bodenfeuchtigkeit. Angew. Bot., 14:1-27. 1932

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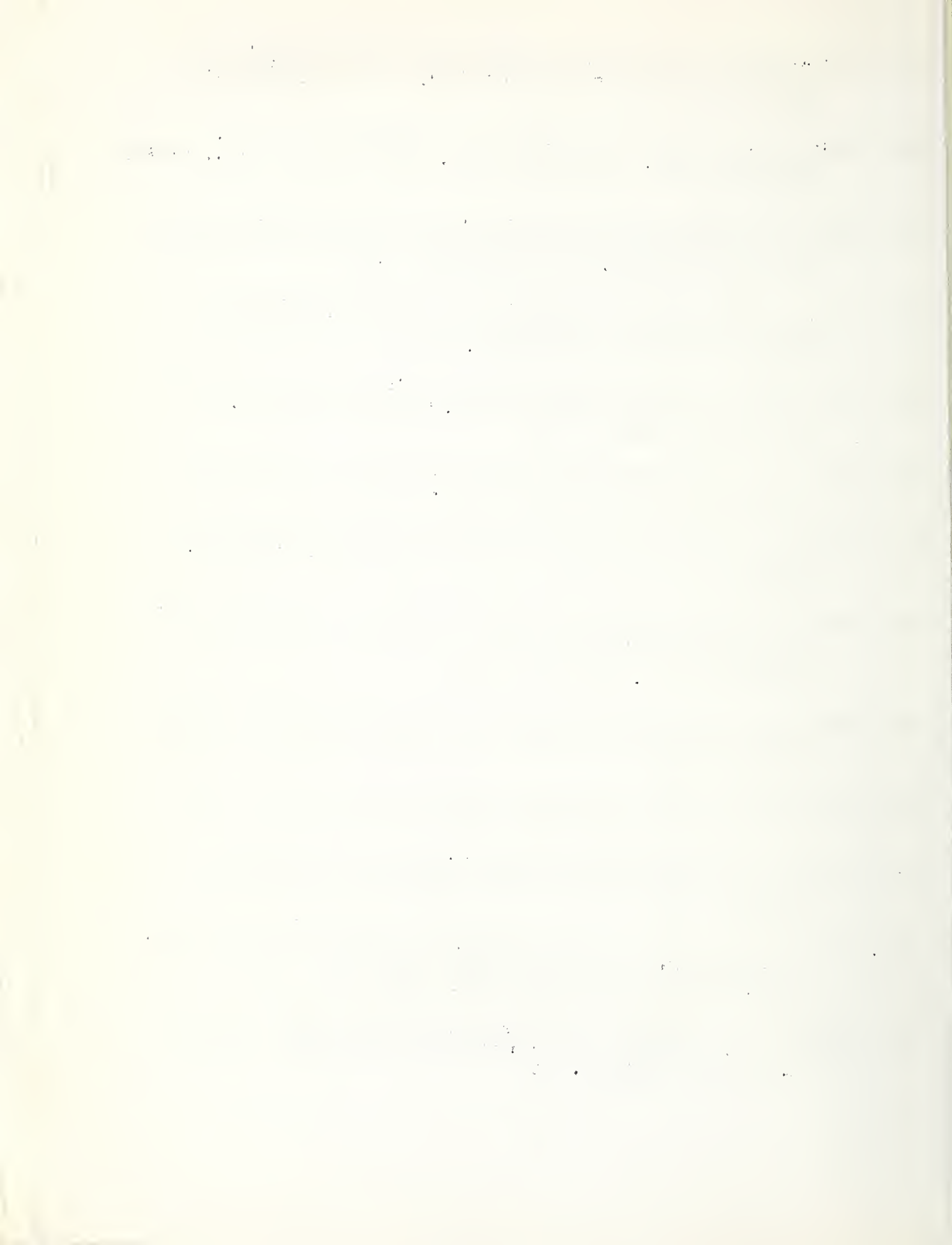
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813. Niklitschek, A. Wie die pflanze ihre lebenstätigkeiten regelt: die sinnreiche einrichtung der spaltoffnungen. Koamos, 31:21-27. 1934
814. Nikolaev, A. V. K metodike opredeleniia transpiratsii rastenii. Vsescuзн. Akad. Sel'skokhoz. Nauk. im V. I. Lenina. Dok., 10(7/8): 41-45. 1945
815. Nikolic, M. Beiträge zur physiologie der spaltoffnungsbewegung. I. Der einfluss von sauren auf transpiration und spaltoffnungsbewegung. Beih. Bot. Centralbl. Abt I, 41:309-326. 1925
816. ————. Beiträge zur physiologie der spaltoffnungsbewegung. II. Über die beziehung der stomatarbewegung zur lichtintensität. Beih. Bot. Centralbl., 41:327-346. 1925
817. Nilsson-Ehle, H. Spaltoffnungsstudien bei schwedischen sumpfpflanzen von H. Nilsson-Ehle. Luna, C. W. K. Gleerup: Leipzig, O. Harrassowitz, 57(2):1. 1914
818. Nissen, Oivind Spalteapningenes størrelse hos tvillingplanter med ulike kromosomtall. Bot. Not. 28-34. 1937
819. Nitsche, H. Der einfluss der wurzelabkühlung auf wasseraufnahme und transpiration der pflanzen. Oesterr. Bot. Zeit., 86:161-197. 1937
820. Nius, E. Untersuchungen über den einfluss des interzellular volumens und der offnungsweite der stomata auf die luftwegigkeit der laubblätter. Jahrb. Wiss. Bot., 74:33-126. 1931
821. Noggle, G. R. The rate of transpiration in two oats varieties grown under varying soil moisture levels. Ill. State Acad. Sci. Trans. 35:73-74. 1942
822. Nordhaus, M. Ueber die saugkraft transpirierender sprosse. Ber. Deut. Bot. Ges., 34:619-639. 1916
823. ————. Zur kenntnis der saugkraft und der wasserversorgung transpirierender sprosse. Jahrb. Wiss. Bot. Pringsheim, 58: 295-335. 1917
824. Novotel'nova, U. S. Vliianie rentgenovykh luchei i emanatsii radiia na pigmentnuu sistemy khloroplasta i ust'ichny: apparat lista. Sovetsk. Botanika 1940(5/6):214-220. 1940
825. Nutman, F. J. Studies of the physiology of Coffea arabica. I. Photosynthesis of coffee leaves under natural conditions. Annals of Bot. N. S., 1:353-368. 1937



826. Nutman, F. J. Studies of the physiology of Coffea arabica. II. Stomatal movements in relation to photosynthesis under natural conditions. Annals of Bot. N. S., 1:681-693. 1937
827. _____. Studies on the physiology of Coffea arabica. III. Transpiration rates of whole trees in relation to natural environmental conditions. Annals of Bot. N. S., 5:59-81. 1941
828. _____. Note on the relationship between climatic factors and transpiration and assimilation of Eugenia aromatica. Annals of Bot. N. S., 17:611-614. 1953
829. Oehlkers, F. Verdunstung und zugwachs unserer hauptholzarten als funktion der standortsfactoren. Mitt. Forstwirtschaft. u Forstwiss. 11:38-86. 1940
830. Ohga, I. The casting method for the study of leaf surfaces and the number of stomata of some Manchurian plants. Bot. Mag. Tokyo, 40:550-553. 1926
831. Okanenko, A. S., and F. I. Zavgorodny. Transpiration of plants with different quantity of chlorophyll and different degrees of wilting. Trudy Nauchw. Inst. Selektivs., 2:81-106. 1929
832. Oppenheim, J. D. Researches on the changes in the opening of the stomata which occur in different species of Citrus. Agr. Rec. Inst. Agr. & Nat. Hist. Zionist Organ., 1:9-39. 1927
833. Oppenheimer, H. R. Critical remarks on the value of Lloyds' alcohol fixation method for measuring stomatal aperture. Palestine Jour. Bot. Hort. Sci., 1:43-47. 1935
834. _____. Studies on the water balance of unirrigated woody plants. Palestine Jour. Bot., Rehovot Ser. 6:63-77. 1947
835. _____. La determination de l'ouverture stomatique chez la tomate. Palestine Jour. Bot., Rehovot Ser. 7:63-68. 1949
836. _____. Summer drought and water balance of plants growing in the Near East. Jour. Ecol., 39:356-362. 1951
837. _____. An experimental study on ecological relationships and water expenses of Mediterranean forest vegetation. Palestine Jour. Bot., Rehovot Ser. 8:103-124. 1953
838. _____, and Mendel, K. Some experiments on water relations of Citrus trees. Hadar 7:35-37, 59-61, 150-153. 1934

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2. The second part of the document outlines the various methods used to collect and analyze data. It includes a detailed description of the sampling process and the statistical techniques employed to interpret the results.

3. The third part of the document presents the findings of the study. It shows that there is a significant correlation between the variables being studied, which supports the hypothesis that was tested.

4. The fourth part of the document discusses the implications of the findings for future research and practice. It suggests that the results of this study could be used to inform policy decisions and to guide the development of new programs and initiatives.

5. The fifth part of the document provides a summary of the key points discussed in the report. It reiterates the importance of the findings and the need for continued research in this area.

6. The sixth part of the document includes a list of references to the sources used in the study. It provides a comprehensive overview of the literature that informed the research.

7. The seventh part of the document contains a list of appendices that provide additional information and data related to the study. These appendices are intended to support the findings and provide a more complete picture of the research.

8. The eighth part of the document includes a list of figures and tables that illustrate the data and results of the study. These visual aids are used to make the information more accessible and easier to understand.

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10. The tenth part of the document includes a list of acknowledgments that thank the individuals and organizations that provided support and assistance during the course of the study. These acknowledgments are a way to recognize the contributions of others and to express appreciation for their help.

839. Ostromecki, J. Evapotranspiration of sugar beets on alluvial soils. Roczn. Nauk. Roln. Ser. F, Melior i Użytków Zielonych, 73(3): 511-533. 1959
840. Otis, C. H. Measuring the transpiration of immersed water plants. Rep. Mich. Acad. Sci., 13:250-253. 1911
841. _____. The transpiration of immersed water plants: its measurement and its relationships. Botan. Gaz., 58:457-494. 1914
842. Overly, F. L., E. L. Overholser, and I. A. Haut. The relation of soil moisture and spray applications to stomatal behaviour and growth of Jonathan apples. Proc. Amer. Soc. Hort. Sci., 28:543-546. 1931.
843. Overton, J. B. Studies on the relation of living cells to transpiration and sap flow in Cyperus. Botan. Gaz., 51:28-63, 102-120. 1911
844. Paetz, K. W. Untersuchungen über die zusammenhänge zwischen stomatarer öffnungsweite und bekannten intensitäten bestimmter spectralbezirke. Planta, 10:611-665. 1930
845. Paleev, A. M. Sutochyi khod ust'ichnogo duizheniia u Vitis vinifera. Izv. Glavn. Bot. Sada, SSSR, 29:219-236. 1930
846. Parija, P. and B. Samantarai, March of transpiration of a leaf since its measurable stage to its fall. Jour. Indian Bot. Soc., 18: 65-77. 1939
847. Parker, J. Effects of variations in the root-leaf ratio on transpiration rate. Plant Physiol., 24:739-743. 1949
848. _____. The effects of flooding on the transpiration and survival of some southeastern forest tree species. Plant Physiol., 25: 453-468. 1950
849. _____. The cut leaf method and estimations of diurnal trends in transpiration from different heights and sides of an oak and a pine. Botan. Gaz., 119:93-101. 1957
850. Parkin, J. Stomata and phylogeny. Annals of Bot., 38:795-796. 1924
851. Parshall, R. L. Laboratory measurement of evapotranspiration losses. Jour. For., 35:1033-1040. 1937
852. Pawlenka, K. Untersuchungen über kurzfristige einwirkungen von gasen auf die luftwegigkeit der laubblätter. Beit. Biol. Pflanz., 22: 273-314. 1933

1. The first part of the report is a general introduction to the subject of the study. It discusses the importance of the problem and the objectives of the research.

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4. The fourth part of the report is a discussion of the implications of the study. It includes a discussion of the practical applications of the findings, a discussion of the limitations of the study, and a discussion of the directions for future research.

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11. The eleventh part of the report is a list of abbreviations. It includes a list of the abbreviations that are used in the report.

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14. The fourteenth part of the report is a list of figures. It includes a list of the figures that are included in the report.

853. Pearson, G. Studies in transpiration of coniferous tree seedlings. Ecology, 5:340-347. 1924
854. Pekarek, J. Über die aziditätsverhältnisse in den epidermisund schliesszellen bei Rumex acetosa im licht und im dunkeln. Planta, 21:419-446. 1934
855. _____. Bemerkungen zur schliesszellen-permeabilität offener und geschlossener spaltöffnungen. Beih. Bot. Centralbl. Abt. A, 55:303-310. 1936
856. Penfound, W. T. The anatomy of the castor bean as conditioned by light intensity and soil moisture. Amer. Jour. Bot., 19:538-546. 1932
857. Pengelly, M. Demonstration methods for the study of stomatal action. Rep. Mich. Acad. Sci., 20:154. 1918
858. Penman, H. L. The dependence of transpiration on weather and soil conditions. Jour. Soil Sci., 1:74-89. 1949
859. _____. Theory of porometers used in the study of stomatal movements in leaves. Proc. Roy. Soc. B, 130:416-434. 1942
860. _____. Natural evaporation from open water, bare soil, and grass. Proc. Roy. Soc. A, 193:120-148. 1948
861. _____. Physics in agriculture. Jour. Sci. Inst., 25:425-432. 1948
862. _____, and J. Long. A portable thermistor bridge for micro-meteorology among growing crops. Jour. Sci. Instrum., 26:77-80. 1949
863. _____, and R. K. Schofield. Some physical aspects of assimilation and transpiration. Symp. Soc. Exptl. Biol., 5:115-129. 1952
864. Peterhansel, H. Experimental investigations on the relations between soil moisture and the use of water by plants. Bot. Arch., 36: 99-151. 1934
865. Peterson, D. Die spaltöffnungszahl von Rumex acetosa L. Bot. Not., 175-193. 1929
866. Pfitzer, E. H. H. Beiträge zur Kenntniss der hautgewebe der pflanzen. Jahrb. Wiss. Bot. Pringsh., 7:532-587. 1870
867. Pfeleiderer, H. Kritische untersuchungen zur methodik der transpirationsbestimmung an abgeschnittenen sprossen. Zeit. Bot., 20: 305-327. 1933

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$f^{(n)}(x) = f^{(n)}(x_0) + f^{(n+1)}(\xi)(x-x_0)$
 $\left(\xi \in (x_0, x) \right)$
 $\Rightarrow f^{(n)}(x) = f^{(n)}(x_0) + \frac{f^{(n+1)}(\xi)}{(n+1)!}(x-x_0)^{n+1}$
 $\Rightarrow f^{(n)}(x) = f^{(n)}(x_0) + \frac{f^{(n+1)}(\xi)}{(n+1)!}(x-x_0)^{n+1}$

$$f_{\alpha} = \frac{1}{(2\pi)^d} \int_{\mathbb{R}^d} e^{i\langle x, y \rangle} f(y) dy$$

868. Philipp, W. Transpirationsversuche mit betaruben im laboratorium und frei land. Wiss. Arch. Landw. Abt. A, Pflanzenbau, 8:70-120. 1931
869. Pieniazek, S. A. Physical characters of the skin in relation to apple fruit transpiration. Plant Physiol., 19:529-536. 1944
870. Pinkhof, M. A new method of recording the modifications in aperture of stomata. Proc. Kn. Akad. Wet. Amst., 23.2:1303-1320. 1922
871. Pisek, A. Zur beobachtung des öffnungszustandes der spalten am lebenden blatt. Ber. Deut. Bot. Ges., 53:624-629. 1935
872. _____, and E. Berger. Kutikuläre transpiration und trockenresistenz isolierter blätter und sprosse. Planta, 28:124-155. 1938
873. _____, and E. Cartellieri. Zur Kenntnis des wasserhaushaltes der pflanzen. I. Sonnenpflanzen. Jahrb. Bot., 75:195-251. 1931
874. _____, and _____. Zur Kenntnis des wasserhaushaltes der pflanzen. II. Schattenpflanzen. Jahrb. Wiss. Bot., 75:643-678. 1932
875. _____, and _____. Zur Kenntnis des wasserhaushaltes der pflanzen. III. Alpine zwergsträucher. Jahrb. Wiss. Bot., 79:131-190. 1933
876. _____, and _____. Zur Kenntnis des wasserhaushaltes der pflanzen. IV. Bäume und sträucher. Jahrb. Wiss. Bot., 88:22-68. 1939
877. _____, and _____. Der wasserverbrauch einiger pflanzenvereine. Jahrb. Wiss. Bot., 90:255-291. 1941
878. _____, and H. Knapp. Zur Kenntnis der respirationsintensität von blättern verschiedener blütenpflanzen. Ber. Deut. Bot. Ges., 72(7):287-294. 1959
879. _____, and W. Tranquillini. Transpiration und wasserhaushalt der fichte (Picea excelsa) bei zunehmender luft- und bodentrockenheit. Physiol. Plantarum, 4:1-27. 1951
880. _____, and E. Winkler. Die schliessbewegung der stomata bei ökologisch verschiedenen pflanzentypen in abhängigkeit vom wassersättigungszustand der blätter und vom licht. Planta, 42:253-278. 1953
881. Plankl, L. Der jahreszeitliche verlauf der transpiration als grundlage der lebendtränkung von waldbaumen. Diss. München. 1955

882. Platt, R. B., and J. N. Wolf. General uses and methods of thermistors in temperature investigations, with special reference to a technique for high sensitivity contact temperature measurement. *Plant Physiol.*, 25:507-512. 1950
883. Player, M. A. Effects of some growth regulating substances on the transpiration of Zea mays, L., and Ricinus communis, L. *Plant Physiol.*, 25:469-477. 1950
884. Pleasants, A. L. The effect of nitrate fertilizer on stomatal behavior. *Jour. Elisha Mitchell Sci. Soc.*, 46:95-116. 1930
885. Pont, J. W. Ecological applications of the stomatal index. *Beih. Bot. Centralbl.*, Abt. A, 59:214-224. 1939
886. Pool, R. J. Xerophytism and comparative leaf anatomy in relation to transpiring power. *Botan. Gaz.*, 76:221-240. 1923
887. Poplavska, G. I. On winter transpiration in different geographical races of the same plant species. *Acad. Sci. I'URSS Compt. Rend.*, 48:670-673.
888. ———. O raspredelenii ust'its u rastenii. *Akad. Nauk. SSSR Dok.*, 66:949-952. 1949
889. Porsch, O. Der spaltoffnungsapparat im lichte der phylogenie. Ein beitrage zur phylogenetischen pflanzenhistologie. Jena, G. Fischer, 196 p. 1905
890. Postlethwait, S. N., and B. Rogers. Tracing the path of the transpiration stream in trees by the use of radioactive isotopes. *Amer. Jour. Bot.*, 45(10):753-757. 1958.
891. Preston, R. D. The transpiration of plants. *Proc. Leeds Phil. Soc.*, 6:154-167. 1954
892. Pringsheim, E. G. Ueber die transpiration bei Fucus. *Jahrb. Wiss. Bot.*, 62:244-257. 1923
893. ———. Ueberlegungen zur physik der transpirationseinschränkung. *Lotos*, 74:1-11. 1927
894. Privault, D. L'apparition des stomates sur les plantules de gymno-spermes. In *Annales des Sciences Naturelles, Botanique*, Paris, Ser. 10, 15:1-14. 1933

895. Proskoriakov, E. I., M. K. Deulina, and Z. T. Popova. Anatomiiā lista i intensivnost transpiratsii v predelakhobshchego organizatsionnogo plana rastenii razlichnykh ekologicheskikh tipov. Trudy Bot. Opytn. Stan. Voronezh., 1:33-57. 1929
896. Puglisi, M. Sulla traspirazione di alcune piante a foglie semori verdi. Ann. di bot., 2:455-468. 1905
897. Pulling, H. E. Sunlight and its measurement. Plant World, 22:151-171, 187-209. 1919
898. Pyrkosch, G. Licht und transpirationswiderstand. I. Die transpirationswiderstand in monochromatischen licht. Protoplasma, 26: 418-437. 1936
899. ———. Licht und transpirationswiderstand. II. Der einfluss des lichten auf kolloidals systeme. Protoplasma, 26:520-537. 1936
900. Rachid, M. Transpiração e sistemas subterraneos da vegetação di verao dos campos cerrados de Emas. Sao Paulo Univ. Fac. Fil. Cien. e Let. Bot., 20(5):5-140. 1947
901. Raschke, K. Über die physikalischen beziehungen swischen wärmeübergangszahl, strahlungsaustausch, temperatur und transpiration eines blattes. Planta, 48:200-238. 1955
902. ———. Über den einfluss der diffusionswiderstand auf die transpiration und die temperatur eines blattes. Flora, 146(4): 546-578. 1958
903. Ratner, E. I. O roli transpiratsii v pogloshchenii mineral'nykh veshchestv rasteniem v svyazi s kul'turoi zasolenykh pochv. Akad. Nauk. SSSR, Izv. Ser. Biol. 567-582. 1945
904. Rawitscher, E. L. Limitação do uso da potometria em medidas de transpiração vegetal. Anais. Acad. Brasil. Cien., 21:111-138. 1949
905. Rawitscher, F. Algumas nocoas sobre transpiracao eo balanço d'agua de plantas brasileiras. Anais. Acad. Brasil. Cien., 14:17-36. 1942
906. ———. Beobachtungen zur methodik der transpirationsmessungen bei pflanzen. Ber. Deut. Bot. Ges., 68:287-296. 1955

10

907. Rawitscher, F. K., and M. G. Ferri. Observações sobre a metodologia para o estudo da transpiração cuticular em plantas brasileiras, especialmente em Cedrela fissilis. São Paulo, Brasil Univ. Fac. Fil. Cien e Let. Bot., 3:115-136. 1942
908. _____, and E. Rawitscher. Inadequacy of potometry for measuring plant transpiration. Nature, 163:68-69. 1949
909. Rea, M. W. Stomata and hydathodes in Campanula rotundifolia L., and their relation to environment. New Phytologist, 20:56-72. 1921
910. Reed, H. S. The effect of certain chemical agents upon the transpiration and growth of wheat seedlings. Botan. Gaz., 49:81-109. 1910
911. _____, and E. Hirano. The density of stomata in citrus leaves. Jour. Agr. Res., 43:209-222. 1931
912. Rees, A. R. Field observations of midday closure of stomata in the oil palm, Elaeis guineensis Jacq. Nature, 182:735-736. 1958
913. Rehfoos, L. Étude sur les stomates. Bul. Soc. Bot. Genève II, 9: 245-350. 1917
914. _____. Recherches expérimentales sur la morphogénèse des stomates. Bul. Soc. Bot. Genève II, 12:93-109. 1921
915. _____. De l'action de conditions extrêmes sur la structure du stomate du Zea mays. Bul. Soc. Bot. Genève II, 12:110-121. 1921
916. Reinken, G. The transpiration of apple trees. Internat. Hort. Cong. Abs. Papers, 15:61. 1958
917. Remy, T. Transpiration und durreverträglichkeit der pflanzen. Pflanzenbau, 7:307. 1931
918. Renner, O. Beiträge zur physik der transpiration. Flora, 100:451-547. 1910
919. _____. Experimentelle beiträge zur Kenntniss der wasserbewegung. Flora, 103:171-175. 1911
920. _____. Zur physik der transpiration. I. Ber. Deut. Bot. Ges., 29:125-132. 1911
921. _____. Zur physik der transpiration. II. Ber. Deut. Bot. Ges., 30:572-575. 1912
922. _____. Theoretisches und experimentelles zur Kohäsionstheorie der wasserbewegung in der pflanze. Jahrb. Wiss. Bot., 46:617-667. 1915

923. Renner, O. Versuche zur bestimmung des filtrationswiderstandes der wurzeln. Jahrb. Wiss. Bot., 70:805-838. 1929
924. Renoux, C. G. Sur le role de la transpiration végétale dans la production de la rosée. Rev. Sci. Bourbonnais et Centre de la France, 4:49-55. 1891
925. Reuter, L. Protoplasmatik der stomatazellen der gleitzone der Nepenthes-Kanne. Protoplasma, 30:273-282. 1938
926. _____. Beobachtungen an den spaltöffnungen von Polypodium vulgare in verschiedenen entwicklungsstadien. Protoplasma, 36:321-344. 1942
927. _____. Die harnstoffpermeabilität der schliesszellen. Versuch eines quantitativen nachweises der permeabilität der schliesszellen. Protoplasma, 37:538-555. 1943
928. _____. Protoplasmatische pflanzenanatomie. Phyton, 1:229. 1949
929. Reynolds, R. The effect of bloom on the transpiration of leaves. Labor. Bul. Oberlin Col., 9:1-3. 1898
930. Rhine, J. B. Clogging of stomata of conifers in relation to smoke injury and distribution. Botan. Gaz., 76:226-232. 1924
931. Riazantsev, A. V. Zimniaia transpiratsiia drevesnykh porod i ee znachenie dlia ikh geograficheskogo rasprostraneniia. Izv. Permsk. Biol. Nauchno.-Issl. Inst., 9:71-86. 1934
932. Richardson, A. E. V. The water requirements of farm crops; factors influencing the transpiration ratio of cereal and fodder crops in Australia. Jour. Dept. Agr., Victoria, Australia. 1923
933. _____. The water requirements of farm crops. Influence of environment on the transpiration ratio. Jour. Dept. Agr., Victoria, 21:193-212, 257-284, 321-339, 385-404, 449-481. 1923
934. _____. Transpiration ration of wheat at different stages of growth. Proc. Australian Assoc. Adv. Sci., 17:662-666. 1926
935. _____, and H. C. Trumble. The transpiration ratio of farm crops and pasture plants in the Adelaide district. Jour. Dept. Agr., South Australia, 32:224-244. 1928
936. Richter, A. Sur la mecanisme de l'appareil stomataire. Zhur. Russk. Bot. Obsch., 2:56-66. 1918

937. Richter, A., and E. J. Dvoretzkaja. Die nebenzellen und ihre funktion. Zhur. Opytn. Agron. Iugo-Vost., 3:51-59. 1927
938. _____, and _____. K voprosu ob ustoichivosti rastenii Iugo-vostoka. Soleustoichivost ust'ichnogo apparata. Zhur. Opytn. Agron. Iugo-Vost., 8:75-85. 1930
939. _____, and N. K. Zelensky. K voprosu ob ustoichivosti rastitel'nykh organizmov. Stoiskost ust'ichnogo apparata pri potere listom vody. Zhur. Opytn. Agron. Iugo-Vost., 8:88-90. 1930
940. Ricôme, H. Influence du chlorure de sodium sur la transpiration et l'absorption de l'eau chez les végétaux. C. R. Acad. Sci. Paris, 137:141-143. 1903
941. Ringoet, A. La transpiration des végétaux en relation avec l'humidité du sol. Bul. Agr. du Congo Belge, 40:762-774. 1949
942. _____. Recherches sur la transpiration et le bilan d'eau de quelques plants tropicales. Publs. Inst. Natl. Etude Agron. Congo Belge, Ser. Sci. 50. 1952
943. Rippel, A. Der einfluss der bodenfeuchtigkeit auf den anatomischen bau der pflanzen, insbesondere von Sinapis alba. Beih. Bot. Zentralbl., Abt. I, 36:107-260. 1919
944. Rijtema, P. E. Calculation methods of potential evapotranspiration. Tech. Bul. Jour. ASAE No. 7. 1960
945. Rombeck, F. Untersuchungen über den stoffwechsel der grünen blätter im belichteten CO₂-freien Raum. Jahrb. Wiss. Bot., 91:187-241. 1943
946. Rosing, M. S. Der Zucker- und stärkegehalt in den schleisszellen offener und geschlossener spaltöffnungen. Ber. Deut. Bot. Ges. 26a:430-445. 1906
947. Rouschal, E. Die geschwindigkeit des transpirationsstromes in macchiengehölzen (thermoelektrische messungen). Sitzunsb. Akad. Wiss. Wien Math.-Naturw. Kl., Abt. I, 146:119-133. 1937
948. _____. Die kühlende wirkung des transpirationsstromes in bäumen. Ber. Deut. Bot. Ges., 57:53-66. 1939
949. _____. Floureszenzoptische messungen der geschwindigkeit des transpirationsstromes an krautigen pflanzen mit berucksichtigung der blattspurleitflächen. Flora, 134(n.s.34):229-256. 1940

1. The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that proper record-keeping is essential for the transparency and accountability of the organization. This section also outlines the various methods used to collect and analyze data, ensuring that the information is reliable and up-to-date.

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950. Rowson, J. M. The significance of stomatal index as a differential character. I - II. Quart. Jour. Pharm. & Pharmacol., 16:24-31, 255-264. 1943
951. Rubel, E. Experimentelle untersuchungen über die beziehungen zwischen wasserleitungsbahn und transpirationsverhältnissen bei Helianthus annuus L. Beih. Bot. Centralbl., 37(abt. 1):1-62. 1920
952. Rudolph, K. Epidermis and epidermale transpiration. Bot. Arch., 9: 49-94. 1933
953. Rufelt, H. Influence of the root pressure on the transpiration of wheat plants. Physiol. Plantarum, 9:154-164. 1956
954. _____. Changes in the transpiration of wheat leaves caused by changes in the properties of the root medium. Physiol. Plantarum, 12(2):390-399. 1959
955. Rumm, C. Ueber die wirkung der kupferpräparate bei bekämpfung der sogenannten blattfallkrankheit der weinrebe. Ber. Bot. Ges., 11:79-93. 1893
956. Rusch, J. Das verhältnis von transpiration und assimilation als physiologische kenngrösse, untersucht an Pappelklonen. Züchter, 29(8):348-354. 1959
957. Russell, R. S., and V. M. Shorrocks. The relationship between transpiration and the absorption of inorganic ions by intact plants. Jour. Exptl. Bot., 10(29):301-316. 1959.
958. Rywosch, S. Über die beziehungen zwischen der zahl der spaltöffnungen und dem bau des blattes. Ber. Deut. Bot. Ges., 43:67-76. 1925
959. Sagromsky, H. Weitere beobachtungen zur bildung des spaltöffnungsmusters in der blattepidermis. Zeit. Naturf., 4b:360-367. 1949
960. Said, H. The effect of stem-ringing on the daily march of stomatal rhythm in Kalanchoe leaves. New Phytologist, 47:288-289. 1948
961. _____, and M. K. Tolba. The effect of pH and the kind of buffer system on the stomatal movements and starch-contents of the guard cells. Bul. Fac. Sci., Fouad I Univ., 27:41-51. 1948.
962. _____, and _____. The effect on stomatal behavior of detaching leaves of Kalanchoe and Mesembryanthemum at different times of the day. New Phytologist, 47:284-287. 1948

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introduction to the subject of the study.
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3. The third part of the report is a
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7. The seventh part of the report is a
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8. The eighth part of the report is a
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9. The ninth part of the report is a
list of endnotes. It is followed by a
list of indexes.

10. The tenth part of the report is a
list of indexes. It is followed by a
list of appendices.

963. Salisbury, E. J. On the causes and ecological significance of stomatal frequency, with special reference to woodland flora. Phil. Trans. Roy. Soc. (London) B, 216:1-55. 1928
964. Sampson, A. W., and L. M. Allen. Influence of physical factors on transpiration. Minn. Bot. Studies, 1-4:33-59. 1909
965. Santos, J. B. Estomas e actividade estomática no sobreiro. Port. Dir. Geral dos Serv. Florestais e Aquícolas Pub. 7:5-53. 1942
966. Satoo, T. Effect of wind and temperature surrounding roots on transpiration of plants in dormant season. Bul. Tokyo Univ. Forests, 36: 20-26. 1948
967. _____. Effect of wind on transpiration of new and old leaves of some trees. Bul. Tokyo Univ. Forests, 36:30-34. 1948
968. _____. Influence of wind on evaporation from combined evaporating surface. Bul. Tokyo Univ. Forests, 37:33-40. 1949
969. _____. Leaf temperature in relation to the influence of wind on transpiration of plants. I, II, III. Bul. Tokyo Univ. Forests, 39:31-54. 1951
970. _____. Influence of wind on transpiration of seedlings of Cryptomeria japonica grown under different soil moisture conditions. Bul. Tokyo Univ. Forests, 44:1-6. 1953
971. Savelli, R., and C. Caruso. Precipitazioni periodiche nei tessuti vegetali. Protoplasma, 32:517-526. 1939
972. Sawyer, W. H. Stomatal apparatus of the cultivated cranberry Vaccinium macrocarpon. Amer. Jour. Bot., 19:508-513. 1932
973. Sax, H. J. The relation between stomata counts and chromosome number. Jour. Arnold Arb., 19:437-441. 1938
974. Sax, K., and H. J. Sax. Stomata size and distribution in diploid and polyploid plants. Jour. Arnold Arb., 18:164-172. 1937
975. Sayre, J. D. Comparative transpiration of tobacco and mullein. Ohio Jour. Sci., 19:422-426. 1919
976. _____. Factors controlling variations in the rate of transpiration. Ohio Jour. Sci., 19:491-509. 1919
977. _____. The relation of hairy leaf coverings to the resistance of leaves to transpiration. Ohio Jour. Sci., 20:55-86. 1920
978. _____. Physiology of stomata of Rumex patientia. Sci., 57:205-206. 1923

1. The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that proper record-keeping is essential for the transparency and accountability of the organization. This section also outlines the various methods used to collect and analyze data, ensuring that the information is reliable and up-to-date.

2. The second part of the document focuses on the implementation of these practices across different departments. It provides a detailed overview of the roles and responsibilities of each team member, ensuring that everyone is clear on their tasks and how they contribute to the overall goals of the organization. This section also includes a timeline for the implementation of these practices, with specific milestones and deadlines.

3. The third part of the document discusses the challenges faced during the implementation process. It highlights the common obstacles encountered by various teams and provides strategies to overcome them. This section also includes a list of resources and support available to the teams, ensuring that they have everything they need to succeed.

4. The fourth part of the document provides a summary of the key findings and conclusions. It reiterates the importance of maintaining accurate records and the need for continuous improvement. This section also includes a list of recommendations for future actions, ensuring that the organization remains committed to transparency and accountability.

5. The final part of the document is a conclusion that summarizes the overall findings and conclusions. It reiterates the importance of maintaining accurate records and the need for continuous improvement. This section also includes a list of recommendations for future actions, ensuring that the organization remains committed to transparency and accountability.

979. Sayre, J. D. Physiology of stomata of Rumex patientia. Ohio Jour. Sci., 26:233-266. 1926
980. _____. A recording atmometer. Ecology, 9:123-125. 1928
981. _____. Opening of stomata in different ranges of wave lengths of light. Plant Physiol., 4:323-328. 1929
982. Scarth, G. W. Stomatal movement: Its regulation and regulatory role. A review. Protoplasma, 2:498-511. 1927.
983. _____. The regulation of stomatal behavior. Rep. Brit. Assoc. Adv. Sci., 95:385. 1927
984. _____. The influence of H-ion concentration on the turgor and movement of plant cells with special reference to stomatal behavior. Proc. Internat. Cong. Plant Sci., (1926):1151-1162. 1929
985. _____. Mechanism of the action of light and other factors on stomatal movement. Plant Physiol., 7:481-504. 1932
986. _____, A. Loewy, and M. Shaw. Use of the infrared total absorption method for estimating the time course of photosynthesis and transpiration. Can. Jour. Res., C26:94-107. 1948
987. _____, and M. Shaw. Stomatal movement and photosynthesis in Pelargonium. I. Effects of light and carbon dioxide. Plant Physiol., 26:207-225. 1951
988. _____, and _____. Stomatal movement and photosynthesis in Pelargonium. II. Effects of water deficit and of chloroform: Photosynthesis in guard cells. Plant Physiol., 26:581-597. 1951
989. _____, J. Whyte, and A. Brown. On the cause of night opening of stomata. Trans. Roy. Soc. (Canada) Sect. 5, 27:115-117. 1933
990. Scheibe, A. Morphologisch-physiologische untersuchungen "über die transpirationsverhältnisse bei der gattung Triticum und deren auswertung für pflanzenzüchtung und kulturpflanzenökologie. Angew. Bot., 9:199-281. 1927
991. Schellenberg, H. C. Beiträge zur Kenntnis von bau und funktion der spaltöffnungen. Bot. Zeit., 1:131. 1896
992. Schirmer, K. Zur kenntniss der transpirationsbedingungen saftreicher pflanzen. Leipzig, Druck von C G Naumann. 26 pp. 1873

1. The first part of the document is a letter from the President of the United States to the Congress, dated January 3, 1862. It is a very long letter, and it contains a great deal of information about the state of the country at that time. The President talks about the war with Mexico, and about the situation in the South. He also talks about the economy, and about the need for more money. The letter is written in a very formal style, and it is very long. It is a very important document, and it is one of the most important documents in the history of the United States.

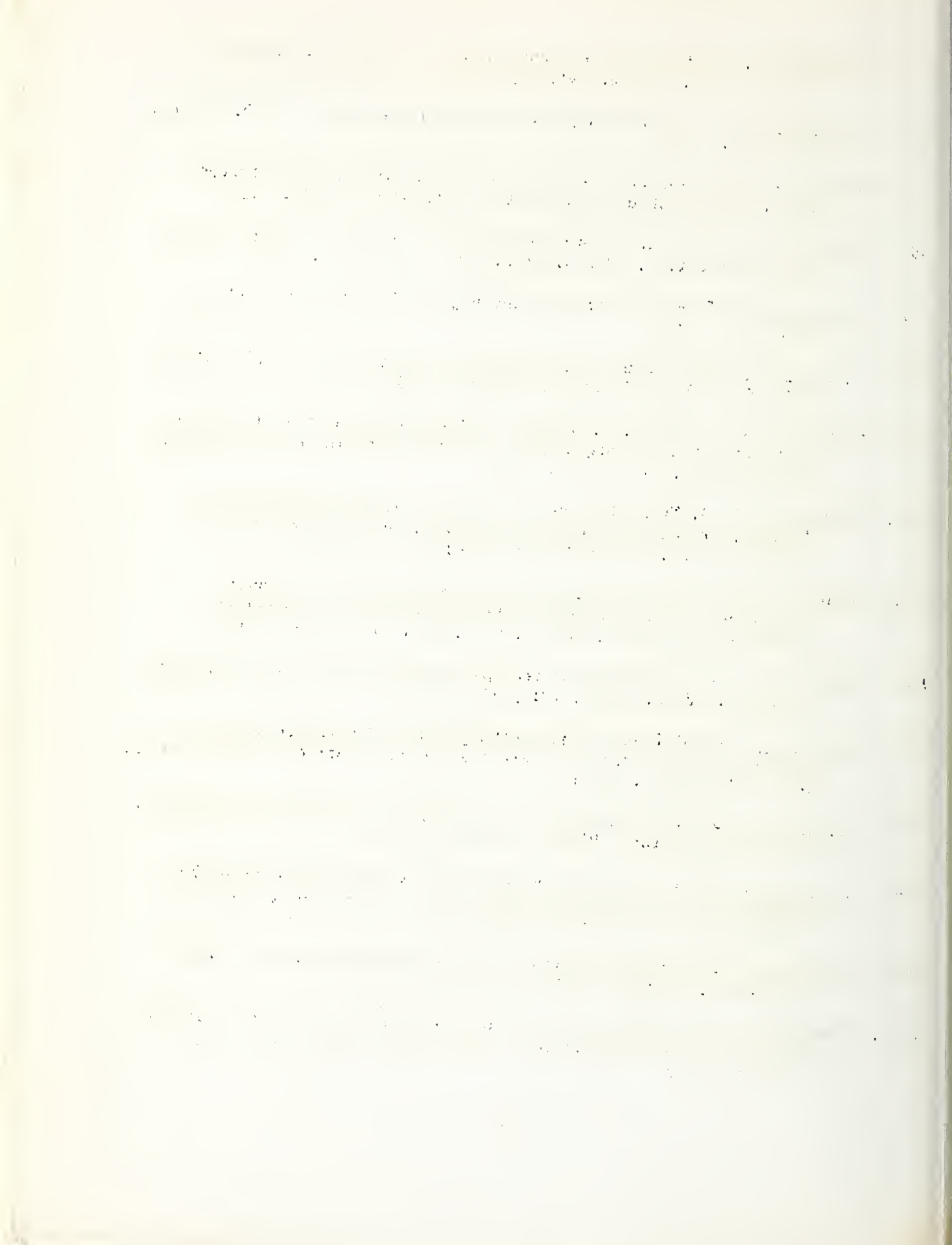
2. The second part of the document is a letter from the Secretary of the Treasury to the President, dated January 3, 1862. It is a very short letter, and it contains a great deal of information about the state of the Treasury. The Secretary talks about the need for more money, and about the need for more bonds. He also talks about the need for more gold, and about the need for more silver. The letter is written in a very formal style, and it is very short. It is a very important document, and it is one of the most important documents in the history of the United States.

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993. Schleiden, M. J. Harmlose bemerkungen über die natur der spaltoffnungen. Arch. Naturg., 4:56-59. 1838
994. _____. Spaltöffnungen auf saamenintegumenten. Arch. Naturg., 5:290-291. 1839
995. Schmetz, L. Untersuchungen über den einfluss einiger aussenfactoren auf den stärkeabbau im laubblatt. Bot. Arch., 10:16. 1925
996. Schmucker, T. Über den einfluss narkotischer stoffe auf transpiration und wasserleitung. Jahrb. Wiss. Bot., 60:771-800. 1928
997. _____. Transpirationsuntersuchungen bei proteaceen. Planta, 24:770-783. 1935
998. _____, and G. Drude. Transpiration verschiedener modifikationen einer art. Naturwissenschaft., 21:676. 1933
999. Schneider, G. W., and N. F. Childers. The influence of soil moisture on photosynthesis, respiration, and transpiration of apple leaves. Plant Physiol., 15:565-583. 1941
1000. Schopmeyer, C. S. Transpiration and physico-chemical properties of leaves as related to drought resistance in loblolly pine and shortleaf pine. Plant Physiol., 14:447-462. 1939
1001. Schorn, M. Untersuchungen über die verwendbarkeit der alkohol-fixierungs -- und der infiltrations-methode zur messung von spaltöffnungs-weiten. Jahrb. Wiss. Bot., 71:783-840. 1929
1002. Schratz, E. Zum vergleich der transpiration xermorpher und mesomorpher pflanzen. Jour. Ecol., 19:292-296. 1931
1003. _____. Vergleichende untersuchungen über den wasserhaushalt von pflanzen im trockengebiete des südlichen Arizona. Jahrb. Wiss. Bot., 74:153-290. 1931
1004. _____. Untersuchungen über die beziehungen zwischen transpiration und blattstruktur. Planta, 16:17-69. 1932
1005. _____. Ueber die bedeutung pflanzlicher temperaturmessung bei transpirationsuntersuchungen am standort. Beih. Bot. Centralbl. Ergänzungsbd., 49:438-455. 1932
1006. _____. Die transpiration der stran- und dünenpflanzen. Jahrb. Wiss. Bot., 84:593. 1937
1007. Schröder, J. Über natürliche und künstliche änderungen des interzellulärvolumens bei laubblättern. Beit. Biol. Pflanz. Cohn, 25: 75-124. 1937



1008. Schubert, A. Untersuchungen über den transpirationsstrom der Nadelhölzer und den wasserbedarf von fichte und larche. Tharendt. Forstl. Jahrb., 90:321-363. 1939
1009. Schurmann, B. Über den einfluss der hydratur und des lichtes auf die ausbildung der stomatainitialen. Flora, 147(4):471-520. 1959
1010. Schütte, K. H. Micronutrient deficiency and transpiration in Tropaeolum majus L. Jour. Exptl. Bot., 10(30):443-447. 1959
1011. Schwabe, W. W. Effects of phototropic treatment on stomatal movement. Nature, 169:1053-1954. 1952
1012. Schwendener, S. Über bau und mechanik der spaltöffnungen. Mber. Preuss. Akad. Wiss., 46:633. 1881
1013. _____. Die spaltöffnungen der Gramineen und Cyperaceen. Sitzber. Kgl. Preuss. Akad. Wiss., 6:1-15. 1889
1014. _____. Gesammelte botanische abhandlungen. Bd. 1, S. 33, u. Zusatz. 1897
1015. Semmens, E. S. S Starch hydrolysis induced by polarized light in stomatal guard cells of living plants. Plant Physiol., 22: 270-276. 1947
1016. Seybold, A. Qualitativ-kinematische betrachtung über die transpirations- und diffusionsverhältnisse von flächen mittlerer blattgrösse. Planta, 4:788-811. 1927
1017. _____. Die physikalische komponente der pflanzlichen transpiration. Monogr. a. d. Gesamtg. Wiss. Bot., 2:1-214. 1929
1018. _____. Die pflanzliche transpiration I. Erg. Biol. 5:29-165. 1929
1019. _____. Untersuchungen über die transpirationswiderstände und über die temperatur ägyptisch-arabischer wüstenpflanzen. Planta, 9:270-314. 1929
1020. _____. Die pflanzliche transpiration II. Erg. Biol., 6:559-731. 1930
1021. _____. Weitere beiträge zur Kenntnis der transpirationsanalyse. I. Planta, 13:16-26. 1931

144

1022. Seybold, A. Weitere beiträge zur transpirationsanalyse. III. Eine methode der differenzierten transpirationsbestimmung in bewegter luft. *Planta*, 14:366-410. 1931
1023. _____. Weitere beiträge zur transpirationsanalyse. IV. Über die transpiration der hutpilze. *Planta*, 16:518-525. 1932
1024. _____. Zur klärung des begriffes transpirationswiderstand. *Planta*, 21:353-367. 1933
1025. _____, and F. Brambring. Über die thermischen eigenschaften der laubblätter I. *Planta*, 20:201-229. 1933
1026. _____, and K. Füsser. Weitere beiträge zur transpirationsanalyse. II. Eine methode zur differenzierten transpirationsbestimmung in unbewegter. luft. *Planta*, 14:77-93. 1931
1027. _____, and H. G. van der Werg. Untersuchungen über iso- und hetero-kalorische laubblätter. *Recueil Trav. Bot. Néerl.*, 26: 97-127. 1929
1028. Shamsutdinov, Z. SH. Transpiration and concentration of the cell sap of some fodder plants under desert conditions in Uzbekistan. *Fiziol. Rast.*, 6(6):735-736. 1959
1029. Shapiro, A. A., and H. deForest. A comparison of transpiration rates in chapparal. *Ecology*, 13:290-295. 1932
1030. Shapiro, S. Stomata on the ovules of Zamia floridana. *Amer. Jour. Bot.*, 38:47-53. 1951
1031. Shaw, L. A method of determining the relative humidity in the inter-cellular spaces of living tissues. *Amer. Jour. Bot.*, 20:675-676. 1933
1032. Shaw, M. Phosphorylase in the chloroplasts of wheat. *Can. Jour. Bot.*, 32:523-525. 1954
1033. _____. Chloroplasts in the stomata of Allium cepa L. *New Phytologist*, 53:344-346. 1954
1034. _____. The physiology of stomata. II. The apparent absence of chlorophyll, photosynthesis, and a normal response to light in the stomatal cells of an albino barley. *Can. Jour. Bot.*, 36:575-579. 1958
1035. _____, and G. A. McLachlan. Chlorophyll content and carbon dioxide uptake of stomatal cells. *Nature*, 173:29-30. 1954

1. The first part of the report is a general introduction to the subject of the study. It discusses the importance of the study and the objectives of the research.

2. The second part of the report is a detailed description of the methodology used in the study. It includes information about the sample size, the data collection methods, and the statistical analysis techniques.

3. The third part of the report is a presentation of the results of the study. It includes tables and graphs showing the data and the findings of the research.

4. The fourth part of the report is a discussion of the results and their implications. It discusses the strengths and limitations of the study and the potential for future research.

5. The fifth part of the report is a conclusion and a summary of the findings. It provides a final statement on the results of the study and the overall conclusions.

6. The sixth part of the report is a list of references. It includes all the sources of information used in the study, such as books, articles, and websites.

7. The seventh part of the report is an appendix. It includes any additional information that is relevant to the study, such as raw data, questionnaires, and interview transcripts.

8. The eighth part of the report is a glossary. It defines the key terms and concepts used in the study, ensuring that the reader understands the language of the report.

9. The ninth part of the report is a list of figures. It includes all the graphs and tables that are used to present the results of the study.

10. The tenth part of the report is a list of tables. It includes all the tables that are used to present the results of the study.

11. The eleventh part of the report is a list of abbreviations. It includes all the abbreviations used in the study, ensuring that the reader understands the shorthand used in the report.

12. The twelfth part of the report is a list of acronyms. It includes all the acronyms used in the study, ensuring that the reader understands the shorthand used in the report.

13. The thirteenth part of the report is a list of symbols. It includes all the symbols used in the study, ensuring that the reader understands the shorthand used in the report.

14. The fourteenth part of the report is a list of units. It includes all the units used in the study, ensuring that the reader understands the shorthand used in the report.

15. The fifteenth part of the report is a list of footnotes. It includes all the footnotes used in the study, ensuring that the reader understands the shorthand used in the report.

1036. Shaw, M., and G. A. McLachlan. The physiology of stomata. I. Carbon dioxide fixation in guard cells. *Can. Jour. Bot.*, 32:764-794. 1954
1037. Shaw, H. R., and J. A. Swezey. Scientific irrigation management. Hawaiian Sugar Planters Assoc., Agr. Chem. Bul. 52. 1937
1038. Shaw, R. H. Leaf and air temperatures under freezing conditions. *Plant Physiol.*, 29:102-104. 1954
1039. Shchepkina, T. V. O printsipakh ustroistva: i deistviia mekhanizma ust'ichnogo apparata u rastenii. *Bot. Zhur. SSSR*, 19:231-249. 1934
1040. Shimek, B. Observations on evaporation and transpiration in prairie and forest. *Sci., N.S.*, 35:157. 1912
1041. Shive, J. W. An improved non-absorbing porous cup atmometer. *Plant World*, 18:7-10. 1915
1042. _____, and B. E. Livingston. The relation of atmospheric evaporating power to soil-moisture content at permanent wilting of plants. *Plant World*, 17:81-121. 1914
1043. _____, and W. H. Martin. The effect of surface films of Bordeaux mixture on the foliar transpiring power in tomato plants. *Plant World*, 20:67-86. 1917
1044. Shkuratenko, Z. V. O povedenii ust'its u rastenii arktiki. *Akad. Nauk. SSSR Dok.*, 75:579-582. 1950
1045. Shreve, E. B. The daily march of transpiration in a desert perennial. *Carnegie Inst. Wash. Pub.*, 194. 1914
1046. _____. Temperature, transpiration and water content of leaves. *Carnegie Inst. Wash. Yearbook*, 13:97-98. 1914
1047. _____. An analysis of causes of variations in the transpiring power of cacti. *Physiol. Res.*, 2:73-127. 1916
1048. _____. The transpiring power of plants. *Carnegie Inst. Wash. Yearbook*, 16:66-68. 1916
1049. _____. A thermo-electric method for the determination of leaf temperature. *Plant World*, 22:100-104. 1919
1050. _____. The role of temperature in the determination of the transpiration power of leaves by hygrometric paper. *Plant World*, 22:172-180. 1919

1. The first part of the report deals with the general situation of the country and the progress of the work during the year. It is divided into two main sections: the first section deals with the general situation of the country and the progress of the work during the year, and the second section deals with the specific results of the work.

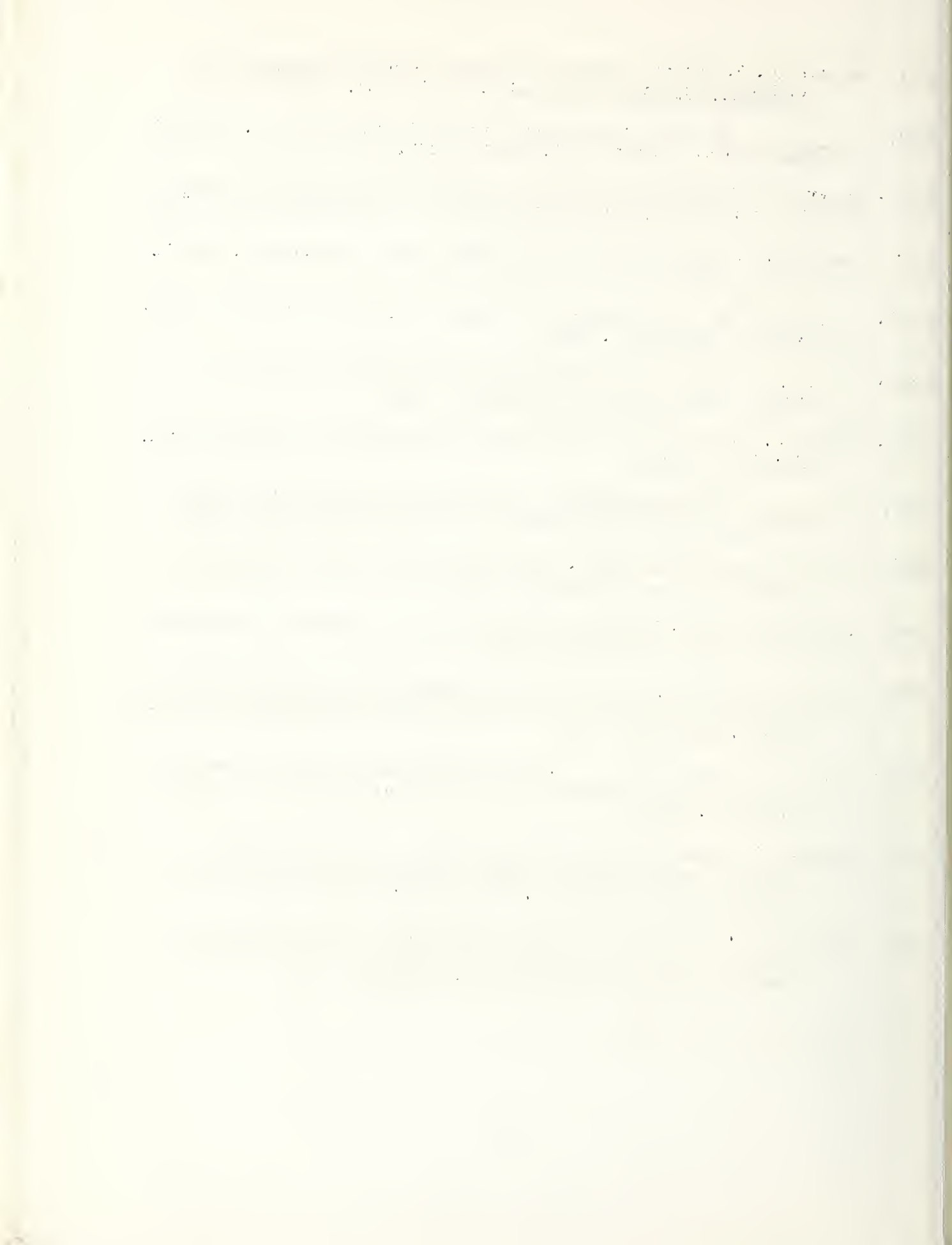
2. The second part of the report deals with the specific results of the work. It is divided into three main sections: the first section deals with the results of the work in the field of agriculture, the second section deals with the results of the work in the field of industry, and the third section deals with the results of the work in the field of commerce.

3. The third part of the report deals with the financial results of the work. It is divided into two main sections: the first section deals with the income of the work, and the second section deals with the expenditure of the work.

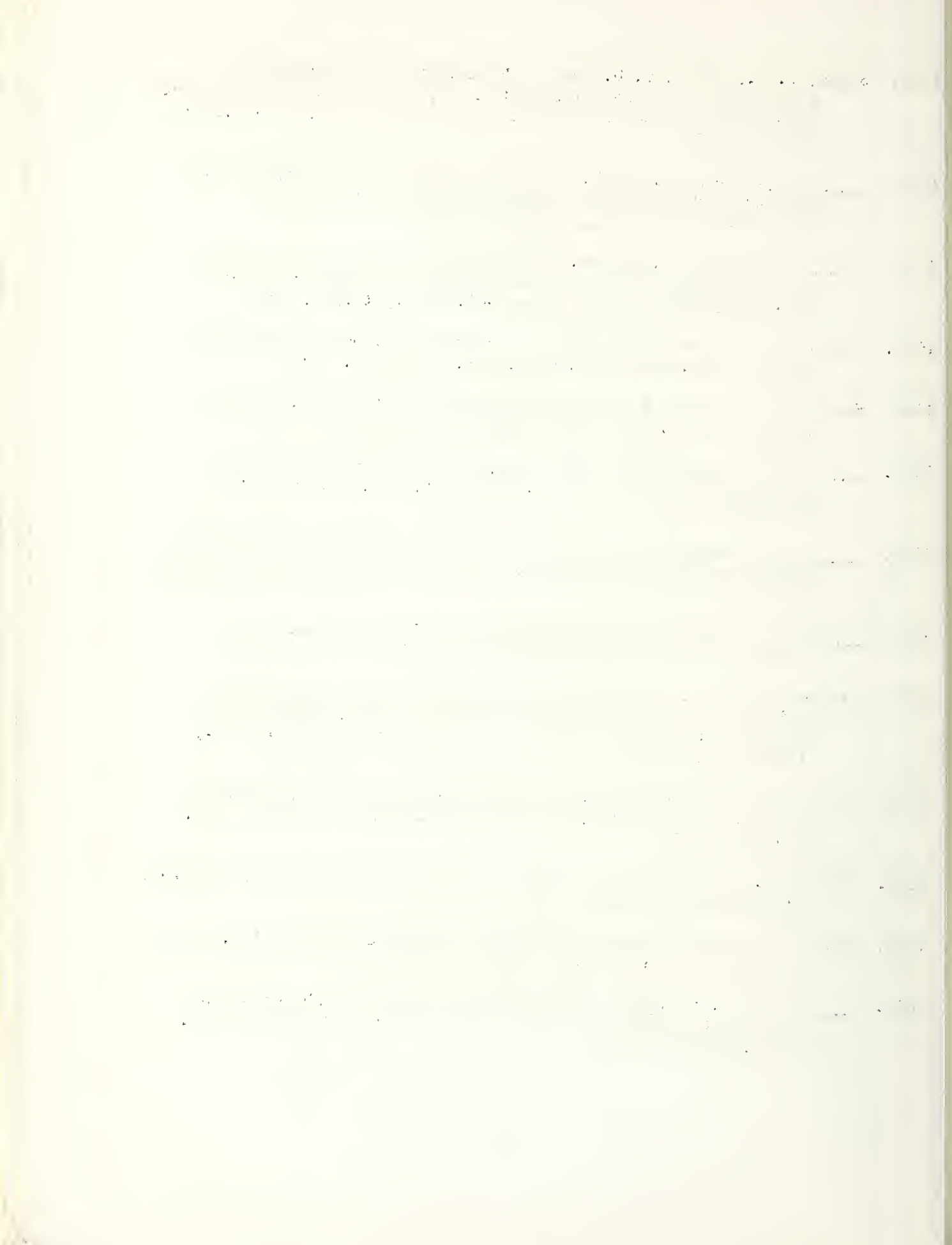
4. The fourth part of the report deals with the general conclusions of the work. It is divided into two main sections: the first section deals with the general conclusions of the work, and the second section deals with the specific conclusions of the work.

5. The fifth part of the report deals with the general recommendations of the work. It is divided into two main sections: the first section deals with the general recommendations of the work, and the second section deals with the specific recommendations of the work.

1051. Shreve, E. B. Factors governing seasonal changes in transpiration of Encelia farinosa. Bot. Gaz., 77:432-439. 1924
1052. _____. The role of sap concentration in transpiration. Carnegie Inst. Wash. Yearbook. 30:262-263. 1931
1053. Shreve, F. Transpiration and water storage in Stelis ophioglossoides Sw. Plant World, 11:165-172. 1908
1054. Shull, C. A. Transpiration as energy dispersal. School Sci. & Math. 19:1-6. 1919
1055. _____. The mass factor in the energy relations of leaves. Plant Physiol., 5:279-282. 1930
1056. _____. Rate of adjustment of leaf temperatures to incident energy. Plant Physiol., 11:181-188. 1936
1057. Sierp, H. Zur physik der pflanzlichen transpiration. Naturwissensch. 18:323-329. 1930
1058. _____. Untersuchungen über die öffnungsbeuegungen der stomata in verschiedenen spektralbezirken. Flora, 128:269-285. 1933
1059. _____, and K. L. Noack. Studien zur physik der transpiration. Jahrb. Wiss. Bot., 60:459-498. 1921
1060. _____, and A. Seybold. Untersuchungen zur physik der transpiration. Planta, 3:115-168. 1927
1061. _____, and _____. Kann die transpiration aus einem multiperforaten Septum die einer gleich grossen wasserfläche erreichen? Planta, 5:616-621. 1928
1062. _____, and _____. Weitere untersuchungen über die verdunstung aus multiperforaten folien mit kleinstem poren. Planta, 9:246-269. 1929
1063. Simonis, W. Untersuchungen zum dürreeffekt. I. Morphologische struktur, wasserhaushalt, atmung und photosynthese feucht und trocken gezogener pflanzen. Planta, 40:313-332. 1952
1064. Singh, B. N. On the use of Bates' evaporimeter and evaporimeters in general in studies on plant transpiration, especially in the open air. Jour. Indian Bot. Soc., 4:149-179. 1924



1065. Singh, B. N., and S. C. D. Gupta. Permeability of protoplasm -- a probable factor in transpiration. (Being a study of transpiration response under ultra-violet radiation.) *Current Sci.*, 3: 50-52. 1934
1066. _____, and R. B. Singh. The role of leaf water content, soil moisture and plant age on transpiration of crop plants. *Jour. Indian Bot. Soc.*, 16:63-80. 1937
1067. _____, and M. M. Sudame. An analysis of the internal factors governing transpiration in land plants; the meaning of xerophily in plants. *Proc. Indian Sci. Cong.*, 18:287. 1931
1068. Sitton, B. G. Some observations on stomatal movements in Hicoria pecan. *Proc. Amer. Soc. Hort. Sci.*, 29:80-82. 1932
1069. Sivadjian, J. Étude hygrographique de la transpiration des plantes. *Acad. Sci. Sompt. Rend.*, 232:1956-1958. 1951
1070. _____. Recherches sur la transpiration des plantes par la méthode hygrographique. *Bul. Soc. Bot. France*, 99:138-141. 1952
1071. _____. Dosage hygrographique de la quantité d'eau perdue par la transpiration foliaire. *Soc. Bot. de France*, B, 106(5/6): 197-200. 1959
1072. _____. Dosage hygrographique de la transpiration de l'arachide. *Oléagineux* 15(1):1-4. 1960
1073. Slatyer, R. O. The influence of progressive increases in total soil moisture stress on transpiration, growth, and internal water relationships of plants. *Australian Jour. Biol. Sci.*, 10:320-336. 1957
1074. _____. The significance of the permanent wilting percentage in studies of plant and soil water relations. *Bot. Rev.*, 23: 585-636. 1957
1075. Slavík, B. The influence of water deficit on transpiration. *Physiol. Plantarum*, 11:524-536. 1958
1076. Small, J. A note on sugar and starch in stomatal guard cells. *New Phytologist*, 49:274-276. 1950
1077. _____, M. I. Clarke, and J. Crosbie-Baird. pH phenomena in relation to stomatal opening. II - V. *Proc. Roy. Soc. Edin.* B, 61:233-266. 1942



1078. Small, J., and K. M. Maxwell. pH phenomena in relation to stomatal opening. I. Coffea arabica and some other species. *Protoplasma*, 32:272-288. 1939
1079. Smith, A. M. On the internal temperature of leaves in tropical isolation with special reference to the effect of color on the temperature. *Ann. Roy. Bot. Gard. Peradniya*, 4:229-298. 1909
1080. Smith, E. P., and M. S. Jolly. Stomatal movement and hydrogen ion concentration. *Nature*, 129:544. 1932
1081. Smith, G. E. On the orientation of stomata. *Annals of Bot.*, 49:451-477. 1935
1082. Smith, H. B. Stomatal behavior of plants in the greenhouse in winter. *Mich. Acad. Sci.*, 2:109-117. 1922
1083. _____. Number of stomata in Phaseolus vulgaris studied with the analysis of variance technique. *Amer. Jour. Bot.*, 24:384-387. 1937
1084. _____. Stomatal index and transpiration rate of leaves. *Sci.*, 89:268-269. 1939
1085. Smith, H. F. The effect of light on transpiration. *Annals of Bot.*, 50:155-159. 1936
1086. Smith, W. H. Evaporation of water from apples in relation to temperature and atmospheric humidity. *Annals App. Biol.*, 20:220-235. 1933
1087. Snow, A. G., Jr. Transpiration as modified by potassium. *Plant Physiol.*, 11:583-594. 1936
1088. Somers, G. F., and K. C. Hamner. Phototube-type integrating light recorders: A summary of performance over a five-year period. *Plant Physiol.*, 26:318-330. 1951
1089. Spalding, V. M. Soil water in relation to transpiration. *Torrey*, 5:25-27. 1905
1090. Spanner, D. C. The suction potential of plant cells and some related topics. *Annals of Bot., N. S.*, 16:379-407. 1952
1091. _____. On a new method for measuring the stomatal aperture of leaves. *Jour. Exptl. Bot.*, 4:283-295. 1953

1. The first part of the paper is devoted to a general discussion of the problem of the origin of life. It is shown that the problem is one of the most important and most difficult in the history of science.

2. The second part of the paper is devoted to a discussion of the various theories of the origin of life. It is shown that the most plausible theory is that of spontaneous generation, which is based on the fact that life is a natural phenomenon.

3. The third part of the paper is devoted to a discussion of the various experiments which have been conducted in order to test the theory of spontaneous generation. It is shown that the results of these experiments are in favor of the theory.

4. The fourth part of the paper is devoted to a discussion of the various objections which have been raised against the theory of spontaneous generation. It is shown that these objections are not valid.

5. The fifth part of the paper is devoted to a discussion of the various applications of the theory of spontaneous generation. It is shown that the theory has many important applications in the field of biology.

6. The sixth part of the paper is devoted to a discussion of the various conclusions which can be drawn from the theory of spontaneous generation. It is shown that the theory is a natural and plausible theory.

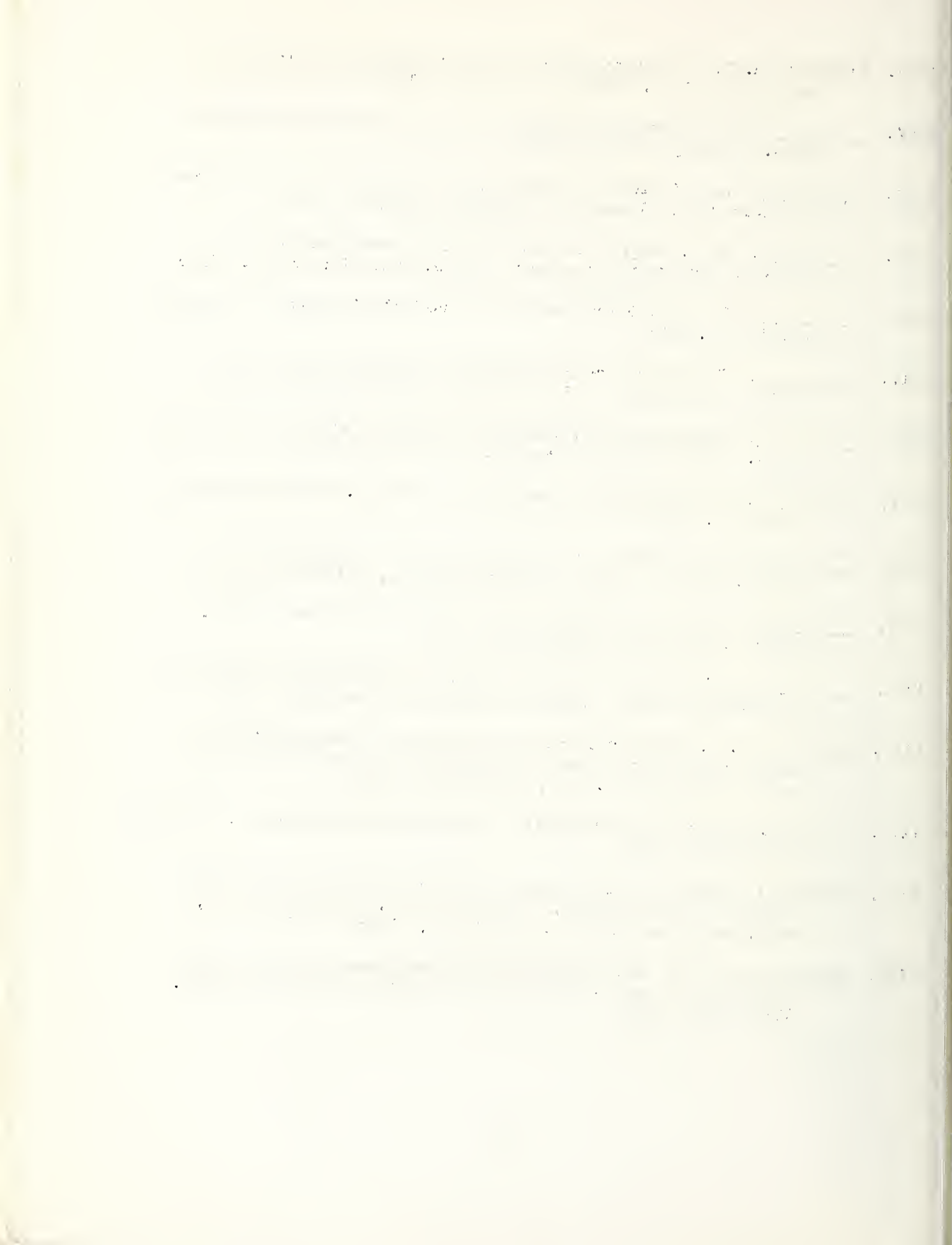
7. The seventh part of the paper is devoted to a discussion of the various questions which remain to be solved. It is shown that there are many important questions which have not yet been answered.

8. The eighth part of the paper is devoted to a discussion of the various methods which can be used in order to solve these questions. It is shown that there are many different methods which can be used.

9. The ninth part of the paper is devoted to a discussion of the various results which have been obtained from the study of the origin of life. It is shown that there are many important results which have been obtained.

1092. Spanner, D. C., and O. V. S. Heath. Experimental studies of the relation between carbon assimilation and stomatal movement. II. The use of the resistance porometer in estimating stomatal aperture and diffusive resistance. Part 2. Some sources of error in the use of the resistance porometer and some modifications of its design. *Annals of Bot. N. S.*, 15:319-331. 1951
1093. Spanner, L. Untersuchungen über den wärme- und wasserhaushalt von Myrmecodia und Hydnophytum. *Jahrb. Wiss. Bot.*, 88:243-. 1939
1094. Sperry, O. E. A study of the growth, transpiration, and distribution of the conifers of the Rocky Mountain National Park. *Bul. Torrey Bot. Clum*, 63:75-103. 1936
1095. Spinner, H. Stomates et altitude. *Ber. Schweiz. Bot. Ges.*, 46:12-27. 1936
1096. Spurr, G. C., Jr. Stomatal studies in normal and polyploid varieties of Tagetes. *Proc. Penn. Acad. Sci.*, 15:213-217. 1941
1097. Stahl, E. Einige versuche über transpiration und assimilation. *Bot. Zeit.*, 52:117-145. 1894
1098. _____. Zur physiologie und biologie der Eckrete. *Flora*, 113: 1-132. 1919
1099. Stälfelt, M. Die abhängigkeit der photischen spaltöffnungsreaktionen von der temperatur. *Planta*, 6:183-191. 1925
1100. _____. Die abhängigkeit der stomataren diffusionskapazität von der exposition der objekte. *K. Sv. Vet. Akad. Handl. Ser. III*, bd. 2, No. 8. 1926
1101. _____. Die photischen reaktionen im spaltöffnungsmechanismus. *Flora, N. S.*, 21:236-272. 1927
1102. _____. Die abhängigkeit der photischen spaltöffnungsreaktionen von der temperatur. *Planta*, 6:183-191. 1928
1103. _____. Die physiologisch-okologische bedingungen der stomataren diffusionskapazitäten. *Svenska Skogsvårds. Tidskr.*, 26:818-845. 1928
1104. _____. Neuere methoden zur ermittlung des öffnungszustandes der stomata. *Abderhalden. Handbuck Biol. Arbeitsmeth. Abt.* 11:167-192. 1929
1105. _____. Pulsierende blattgewebe. *Planta*, 7:720-734. 1929

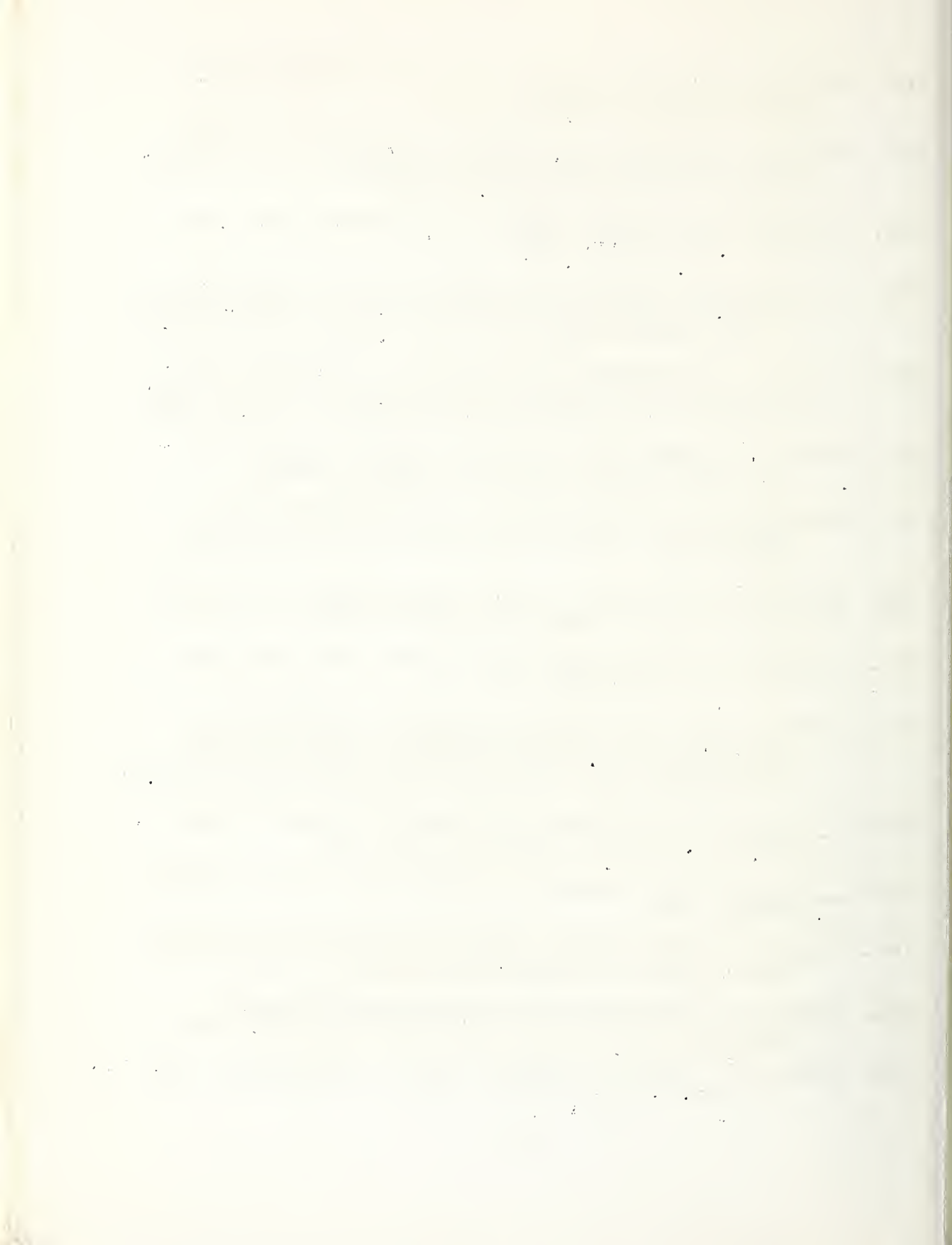
1106. Stålfelt, M. G. Die abhängigkeit der spaltöffnungsreaktionen von der wasserbilanz. *Planta*, 8:287-340. 1929
1107. _____. Der stomatäre regulator in der pflanzlichen transpiration. *Planta*, 17:22-85. 1932
1108. _____. Der einfluss des windes auf die kutikuläre und stomatäre transpiration. *Svensk. Bot. Tidskr.*, 26:45-69. 1932
1109. _____. Die transpiration und kohlenensäureassimilation bei blättern und stroh des hafers. *Angew. Bot.*, 17:157-190. 1935
1110. _____. Die spaltöffnungsweite als assimilationsfaktor. *Planta*, 23:715-759. 1935
1111. _____. The stomata as a hydrophotic regulator of the water deficit of the plant. *Physiol. Plantarum*, 8:572-593. 1955
1112. _____. Morphologie und anatomie des blattes als transpirationsorgan. *Encyc. of Plant Physiol.*, 3:324-341. 1956
1113. _____. Die cuticuläre transpiration. *Encyc. of Plant Physiol.*, 3:342-350. 1956
1114. _____. Die stomatäre transpiration und die physiologie der spaltöffnungen. *Encyc. of Plant Physiol.*, 3:351-426. 1956
1115. _____. The water output of the guard cells of the stomata. *Physiol. Plantarum*, 10:752-773. 1957
1116. _____. The effect of carbon dioxide on hydroactive closure of the stomatal cells. *Physiol. Plantarum*, 12:691-705. 1959
1117. Stanescu, P. P. Daily variations in products of photosynthesis, water content, and acidity of leaves toward end of vegetative period. *Amer. Jour. Bot.*, 23:374-379. 1936
1118. Stark, O. K., and C. J. Whitfield. An improved evaporimeter. *Ecology*, 11:288-292. 1930
1119. Stefan, J. Über die verdampfung aus einem kreisförmig oder elliptisch begrenzten becken. *Sitzgsber. Ksl. Akad. Wiss. Wien, Math.-Naturwiss. Kl. Abt. II*, 83:943. 1881
1120. Steinberger, A. L. Über regulation des osmotischen wertes in den schliesszellen von luft- und wasserspaltten. *Biol. Zentralbl.* 43:405-419. 1922



1121. Steward, F. C. The effect of ringing and transpiration on mineral uptake. *Annals of Bot.*, 7(25):89-92. 1943
1122. Stiles, W. Evaporation in wind. A criticism of the contribution of H. Sierp and K. L. Noack to the physics of transpiration. *Annals of Bot.*, 38:299-304. 1924
1123. Stocker, O. Die transpiration und wasserökologie nordwestdeutscher heide- und moorpflanzen am standort. *Zeit. Bot.*, 15:1-41. 1923
1124. ———. Jegyzetek a magyar pusztai növények levegőnyílásainak nyáron való mozgásairól. *Erdész. Kisérlet. (Hungary)* 30:370-372. 1928
1125. ———. Das wasserdefizit von gefässpflanzen in verschiedenen klimazonen. *Planta*, 7:382-443. 1929
1126. ———. Eine feldmethode zur bestimmung der momentanen transpirations und evaporationsgrösse. *Ber. Deut. Bot. Ges.*, 47:126-136. 1929
1127. ———. Transpiration und wasserhaushalt in verschiedenen klimazonen. I. Unterauchungen an der arktischen baumgrenze in Schwedisch-Lappland. *Jahrb. Wiss. Bot.*, 75:494-549. 1931
1128. ———. Transpiration und wasserhaushalt in verschiedenen klimazonen. II. Untersuchungen in der ungarischen alkalisteppe. *Jahrb. Wiss. Bot.*, 78:751-856. 1933
1129. ———. Transpiration und wasserhaushalt in verschiedenen klimazonen. III. Ein beitrag zur transpirationsgrösse im javanischen regenwald. *Jahrb. Wiss. Bot.*, 81:464-496. 1935
1130. ———. Über die beziehungen zwischen wasser- und assimilationshaushalt. *Ber. Deut. Bot. Ges.*, 55:370-376. 1937
1131. ———. Der wasser- und assimilationshaushalt südalgerischer wüstenpflanzen. *Ber. Deut. Bot. Ges.*, 67:238-299. 1954
1132. ———. Messmethoden der transpiration. *Encyc. Plant Physiol.*, 3:293-311. 1956.
1133. ———. Die abhängigkeit der transpiration von den umweltfaktoren. *Encyc. Plant Physiol.*, 3:436-488. 1956
1134. ———. Die dürreresistenz. *Encyc. Plant Physiol.*, 3:696-741. 1956
1135. ———, G. Leyerer, and G. H. Vieweg. Wasserhaushalt und assimilation. *Schriftenreihe des Kuratoriums für Kulturbauwesen*, H. 3, S. 45-77. 1954

1136. Stocker, O., S. Rehm, and H. Schmidt. Der wasser- und assimilationshaushalt dürreresistenter und dürrereempfindlicher sorten landwirtschaftlichen kulturpflanzen. I. Hafer, Gerste, und Weizen. Jahrb. Wiss. Bot., 91: 1-53. 1943
1137. ———, ———, and ———. Der wasser- und assimilationshaushalt dürreresistenter und dürrereempfindlicher sorten landwirtschaftlicher kulturpflanzen. II. Zuckerrüben. Jahrb. Wiss. Bot., 91:278-330. 1943
1138. Stoger, E. M. Zur permeabilität der schliesszellen. Protoplasma, 39: 588-596. 1950
1139. Stork, C. Evapotranspiration problems in Iraq. Neth. Jour. Agr. Sci., 7(4):257-356. 1959
1140. Strugger, S. Die lumineszenzmikroskopische analyse des transpirationsstromes in parenchymen. I. Die methode und die ersten beobachtungen. Flora, 133:56-68. 1938
1141. ———. Die lumineszenzmikroskopische analyse des transpirationsstromes in parenchymen. II. Die eigenschaften des berherin sulfats und seine speicherung durch lebende zellen. III. Untersuchungen an Helxin e soleirolii Req. Biol. Zentralbl., 59: 274-288, 409-442. 1939
1142. ———. Studien über den transpirationsstrom im blatt von Secale cereale und Triticum vulgare. Flora, 35:97-113. 1940
1143. ———, and F. Weber. Stärkeabbau in mesophyll- und schliesszellen. Ber. Deut. Bot. Ges., 43:431-433. 1925
1144. ———, and ———. Zur physiologie der stomata-nebenzellen. Ber. Deut. Bot. Ges., 44:272-278. 1926
1145. Stul'nikov, M. V. Einfluss der asimilate auf die intensitat der transpiration. Izv. Saratov. Obshch. Estestv., 2:64-80. 1928
1146. Swanson, C. A. Transpiration in American holly in relation to leaf structure. Ohio Jour. Sci., 43:43-46. 1943
1147. Szymańska, S. Budowa aparatu szparkowago u polytrichaceae. Acta. Soc. Bot. Polon., 8:141-156. 1931

1148. Taft, D. L. The effects of habitat on stomatal frequency. Kan. Acad. Sci. Trans., 53:477-487. 1950
1149. Tagawa, T. The influence of atmospheric humidity upon the suction force of the plant shoot, with special reference to the stomatal aperture. Jap. Jour. Bot., 3:85-94. 1936
1150. _____. The influence of light on the stomatal opening. Jap. Jour. Bot., 3:95-112. 1936
1151. _____. The influence of the temperature of the culture water on the water absorption by the root and on the stomatal aperture. I. Jour. Fac. Agr. Hokaido Imp. Univ., Sapporo, 39:271-296. 1937
1152. _____. The influence of the temperature of the culture water on the water absorption by the root and on the stomatal aperture. II. Jour. Fac. Agr. Hokaido Imp. Univ. Sapporo, 45:1-33. 1938
1153. Tanner, C. B. Energy balance approach to evapotranspiration from crops. Soil Sci. Soc. Amer. Proc., 24(1):1-9. 1960
1154. Teodovesco, E. C. L'athermanéité des essences végétales et la transpiration. Rev. Gen. Bot., 35:382-398, 455-464, 509-519, 566-575. 1923
1155. Thatcher, K. M. The effect of peat on the transpiration and growth of certain plants. Jour. Ecol., 9:39-59. 1921
1156. Thielmann, M. Essais de culture des stomates. Compt. Rend. Soc. Biol. Paris, 92:888-890. 1925
1157. Thoday, D. Experimental studies on vegetable assimilation and respiration. V. A critical examination of Sachs' method for using increase of dry weight as a measure of carbon dioxide assimilation in leaves. Proc. Roy. Soc. London B, 82:1-55. 1909
1158. _____. The significance of reduction in the size of leaves. Internat. Bot. Cong., Cambridge, S. 297. 1930
1159. _____. Stomatal movement and epidermal water content. Nature, 141:164. 1938
1160. Thom, C. C., and H. F. Holtz. Factors influencing the water requirements of plants. Wash. Agr. Expt. Sta. Bul. 146. 1917
1161. Thomas, J. B., Water balance and stomatal movements in Cissus sicyoides L. Ann. Bot. Gard. Buitenzorg, 51:167-176. 1949
1162. Thomas, M. D. Effect of ecological factors on photosynthesis. Ann. Rev. Plant Physiol., 6:135-156. 1955



1163. Thomas, M. D., and G. R. Hill. The continuous measurement of photosynthesis, respiration, and transpiration of alfalfa and wheat growing under field conditions. *Plant Physiol.*, 12:285-307. 1937
1164. Thomas, N., and A. Ferguson. On the reduction of transpiration observations. *Annals of Bot.*, 31:241-255. 1917
1165. Thornthwaite, C. W. Atmospheric moisture in relation to ecological problems. *Ecol.*, 21:17-28. 1940
1166. _____. A re-examination of the concept and measurement of potential evapotranspiration. The measurement of potential evapotranspiration. The Johns Hopkins Univ. Lab. of Climatology, Seabrook, N. J., Pub. in Climatology, 7:200-209. 1954
1167. _____. The air as a water absorbing medium. *Encyc. Plant Physiol.*, 3:257-264. 1956
1168. _____, and J. R. Mather. The role of evapotranspiration in climate. *Arch. Meteorol. Geophys. u Bioklimatol.*, Ser. B, 16-39. 1951
1169. Thut, H. F. Demonstrating the lifting power of transpiration. *Amer. Jour. Bot.*, 19:358-364. 1932
1170. _____. Relative humidity variations affecting transpiration. *Amer. Jour. Bot.*, 25:589-595. 1938
1171. _____. Humidity variations affecting transpiration. *Trans. Illinois Acad. Sci.*, 30:153-154. 1938
1172. _____. The relative humidity gradient of stomatal transpiration. *Amer. Jour. Bot.*, 26:315-319. 1939
1173. Timmerman, H. A. Stomatal numbers: their value for distinguishing species. *Pharm. Jour.*, 118(IV,64):241-243. 1927
1174. Timmermann, H. V. Studien über stomatare transpiration. Sobernheim, Buckdruckerei von G Höhnen. 1901
1175. Tolba, M. K. A preliminary note on the correlation between stomatal movements and starch content of the guard cells in evergreens. *Bul. Fac. Sci. Fouad I Univ.*, 31:29-30. 1952
1176. _____. The effect of pH and the kind of buffer system on the stomatal movements and starch contents of the guard cells. Part I *Bul. Fac. Sci. Fouad I Univ.*, 31:41-49. 1952

1. The first part of the report deals with the general situation of the country and the progress of the work during the year. It is divided into two main sections: the first section deals with the general situation of the country and the progress of the work during the year, and the second section deals with the results of the work during the year.

2. The second part of the report deals with the results of the work during the year. It is divided into two main sections: the first section deals with the results of the work during the year, and the second section deals with the results of the work during the year.

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10. The tenth part of the report deals with the results of the work during the year. It is divided into two main sections: the first section deals with the results of the work during the year, and the second section deals with the results of the work during the year.

1177. Tolmachev, I. M. O znachenikh plasticheskikh veshchestv dlia transpiratsii, ust'ichbykh dvizhenii i vodnogo balansu rastenii. Trudy Nauchn. Inst. Selektiv. Kiev, 2:121-162. 1929
1178. Tombesi, L. Fotosintesi, respirazione e traspirazione in funzione del regime idrico. Riv. Ecologia, 1:37-54. 1949
1179. _____. Fotosintesi, quoziento respiratoria, traspirazione, attivita catalasica et ossidasica di alcune specie vegetali in rapporto alle disponibilita idriche del suolo. Ann. Sper. Agraria Roma, N. Ser. 4, Nr. 4, 1950
1180. Tranquillini, W. Der ultrarotabsorptionschreiber im dienst oekologischer messungen des pflanzlichen CO₂ - umsatzes. Ber. Deut. Bot. Ges., 65:102-112. 1952
1181. _____. Über den einfluss von übertemperaturen der blätter bei dauereinschluss in küvetten auf die oekologische CO₂-assimilationsmessung. Ber. Deut. Bot. Ges., 67:191-204. 1954
1182. Transeau, E. N. Apparatus for the study of comparative transpiration. Botan. Gaz., 52:54-60. 1911
1183. Trelease, S. F. Incipient drying and wilting as indicated by movement of coconut pinnae. Amer. Jour. Bot., 9:253-265. 1922
1184. _____. Foliar transpiring power of the coconut. Philippine Jour. Sci., 20:167-176. 1922
1185. _____, and B. E. Livingston. The daily march of transpiring power as indicated by the porometer and by standardized hygrometric paper. Jour. Ecol., 4:1-14. 1916
1186. Tschirch, A. Ueber die beziehungen des anatomischen baues der assimilationsorgane zu klima und standort, mit specieller berücksichtigung des spaltöffnungsapparates. Halle a. S., Gebauer-Schwetschke. 1881
1187. Tsivinskii, V. I. O vliianii plodonosheniia na transpiratsiiu. Dokl. Akad. Nauk. SSSR, 1935(2):76-81. 1935
1188. Tsu, T. M., S. H. Yuch, and Y. Y. A. Kan. Preliminary study on the practical value of the intensity of transpiration method in application to crop production. Acta Agr. Sinica, 10(1):32-41. 1959.
1189. Tsvetkova, E. On the use of the cobalt chloride method in the study of transpiration. Zhur. Russk. Bot. Obsch., 14:19-35. 1929

1. The first part of the report is a general introduction to the subject of the study. It discusses the importance of the study and the objectives of the research.

2. The second part of the report is a detailed description of the methodology used in the study. It includes information about the sample size, the data collection methods, and the statistical analysis techniques.

3. The third part of the report is a presentation of the results of the study. It includes tables and graphs showing the data collected and the statistical analysis results.

4. The fourth part of the report is a discussion of the results and their implications. It discusses the findings of the study and their relevance to the field of study.

5. The fifth part of the report is a conclusion and a list of references. The conclusion summarizes the main findings of the study, and the references list the sources used in the study.

6. The sixth part of the report is a list of appendices. These appendices contain additional information that is relevant to the study but is not included in the main body of the report.

7. The seventh part of the report is a list of figures. These figures are graphs and tables that illustrate the data collected and the statistical analysis results.

8. The eighth part of the report is a list of tables. These tables contain the data collected and the statistical analysis results.

9. The ninth part of the report is a list of footnotes. These footnotes provide additional information about the study and its findings.

10. The tenth part of the report is a list of references. These references list the sources used in the study.

11. The eleventh part of the report is a list of appendices. These appendices contain additional information that is relevant to the study but is not included in the main body of the report.

12. The twelfth part of the report is a list of figures. These figures are graphs and tables that illustrate the data collected and the statistical analysis results.

13. The thirteenth part of the report is a list of tables. These tables contain the data collected and the statistical analysis results.

14. The fourteenth part of the report is a list of footnotes. These footnotes provide additional information about the study and its findings.

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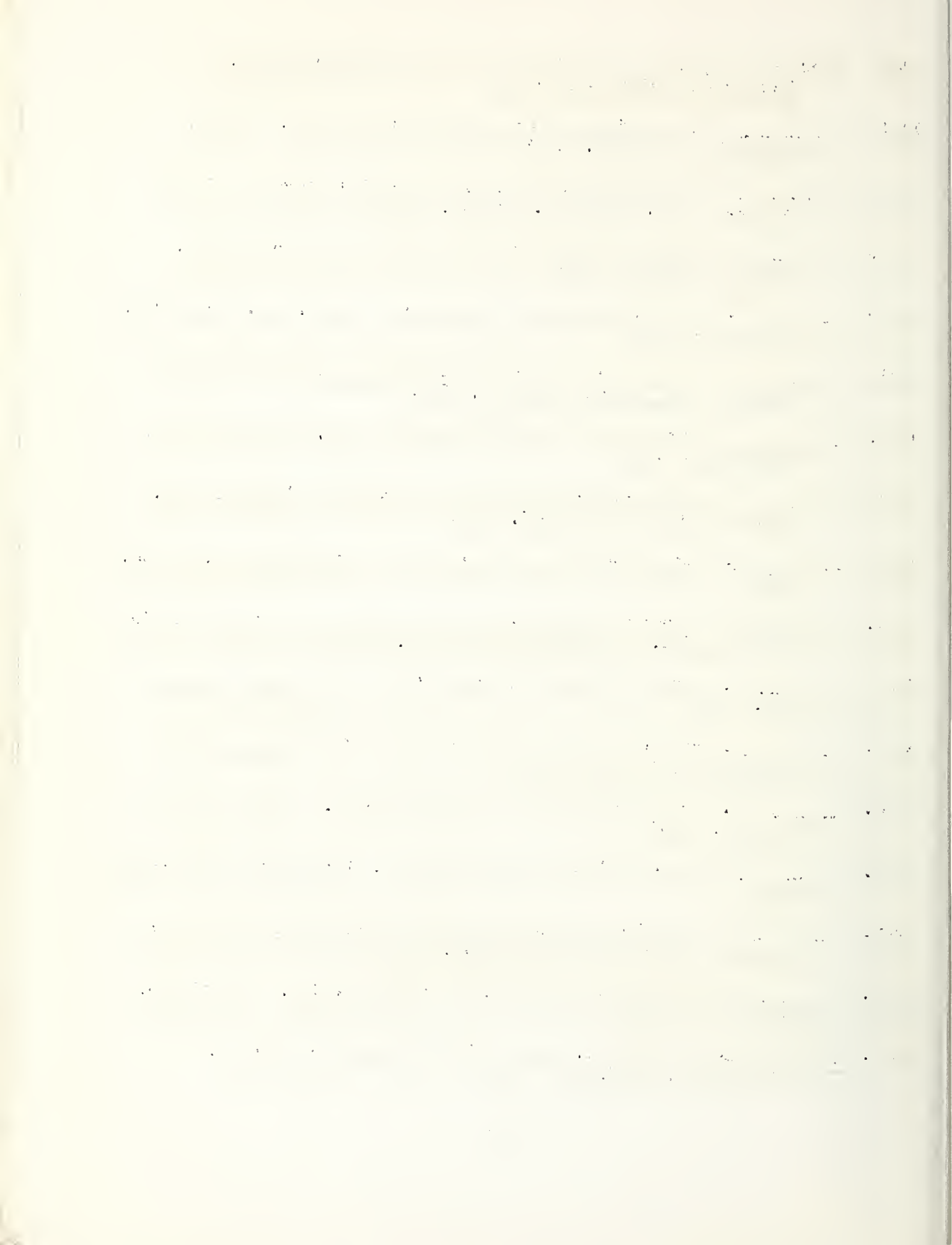
1190. Turesson, G. Erbliche transpirationsdifferenzen zwischen ökotypen derselben pflanzenart. *Hereditas* 11:193-206. 1928
1191. Turrell, F. M. The internal exposed surface of foliage leaves. *Sci.*, 78:536-537. 1933
1192. _____. A method for the measurement of the internal exposed surface of foliage leaves. *Univ. Iowa Stud. Nat. Hist.*, 16: 119-126. 1934
1193. _____. The area of the internal exposed surface of dicotyledon leaves. *Amer. Jour. Bot.*, 23:255-264. 1936
1194. _____. Correlation between internal surface and transpiration rate in mesomorphic and xeromorphic leaves grown under artificial light. *Botan. Gaz.*, 105:413-425. 1944
1195. Ulrich, H., and A. Mäde. Studien über die ursachen der frostresistenz. I. Untersuchungen des temperatúraustauscher an rizinusblättern durch messung von oberflächentemperaturen. *Planta*, 28:344-351. 1938
1196. Unger, F. Neue untersuchungen über die transpiration der pflanzen. *Sitzgsber. Ksl. Akad. Wiss Wien*, 44:181, 327. 1862
1197. Ursprung, A., and G. Blum. Eine methode zur messung des wand- und turgordruckes der zelle, nebst anwendungen. *Jahrb. Wiss. Bot.*, 63:1. 1924
1198. Vaihinger, K. Die bewegungsmechanik der spaltöffnungen. *Protoplasma*, 36:430-443. 1942
1199. Van der Paauw, F. The entrance of water into cut leafy shoots under conditions which prevent transpiration. *Rec. Trav. Bot. Néerl.* 32:293-310. 1935
1200. _____. Water relations of oats with special attention to the influence of periods of drought. *Plant and Soil*, 1:303-341. 1949
1201. van Eijk, M. Analyse der wirkung des NaCl auf die entwicklung, sukkulenz und transpiration bei Salicornia herbacea, sowie untersuchungen über den einfluss der salzaufnahme auf die wurzelatmung bei Aster tripolium. *Rec. Trav. Bot. Neerl.*, 36: 559-657. 1939
1202. van Wyk, W. R., D. A. deVries, and R. H. A. van Duin. Potential evapotranspiration. *Netherl. Jour. Agr. Sci.*, 1:35-39. 1953

1203. van Wýk, W. R., and D. A. deVires. Evapotranspiration. Netherl. Jour. Agr. Sci., 2:105-119. 1954
1204. Vasilev, I. M. Ueber die regulierende tätigkeit der pflanzen bei der transpiration. Zhur. Russk. Bot. Obshch., 13:117-134. 1928
1205. Vassiljev, I. M. Über den wasserhaushalt von pflanzen der sandwüste im südöstlichen Kara-Kum. Planta, 14:225-309. 1931
1206. Veihmeyer, F. J. Some factors affecting the irrigation requirements of deciduous orchards. Hilgardia, 2:125-287. 1927
1207. _____. Evaporation from soils and transpiration. Trans. Amer. Geophysic. Union, 19:612-619. 1938
1208. _____. Soil moisture. Encyc. Plant Physiol., 3:64-123. 1956
1209. _____, and A. H. Hendrickson. Soil moisture conditions in relation to plant growth. Plant Physiol., 2:71-82. 1927
1210. _____, and _____. Soil moisture in relation to plant growth. Ann. Rev. Plant Physiol., 1:285-304. 1950
1211. _____, and _____. The effect of soil moisture on deciduous fruit trees. Report 13, Internat. Hort. Cong., 1:306-319. 1952
1212. _____, _____. Does transpiration decrease as soil moisture decreases? Trans. Amer. Geophysic. Union, 36:425-448. 1955
1213. Velsen, P. J. Porometer untersuchungen an weissbunten blättern des Ficus elastica. Proc. K. Akad. Wetensch. Amsterdam, 33:405. 1930
1214. Venable, E. P. Some notes on plant transpiration. Jour. Elisha Mitch. Sci. Soc., 2:63-66. 1885
1215. Viktorov, D. P., and P. I. Bystriantsev. The influence of phosphorus supply on the transpiration of the seedlings of woody species. Akad. Nauk. SSSR Dok., 128(6):1302-1304. 1959
1216. Villaca, H., and M. G. Ferri. Transpiração de Eucalyptus tereticornis. Univ. São Paulo Fac. Fil. Cienc. Letras. Boletum, 173(Botan. 11): 5-29. 1954
1217. _____, and _____. On the morphology of the stomata of Eucalyptus tereticornis, Ouratea spectabilis and Cedrela fissilis. Univ. Sao Paulo Bol. Fac. Fil. Cienc. Letras., 173 (Botan. 11): 31-52. 1954

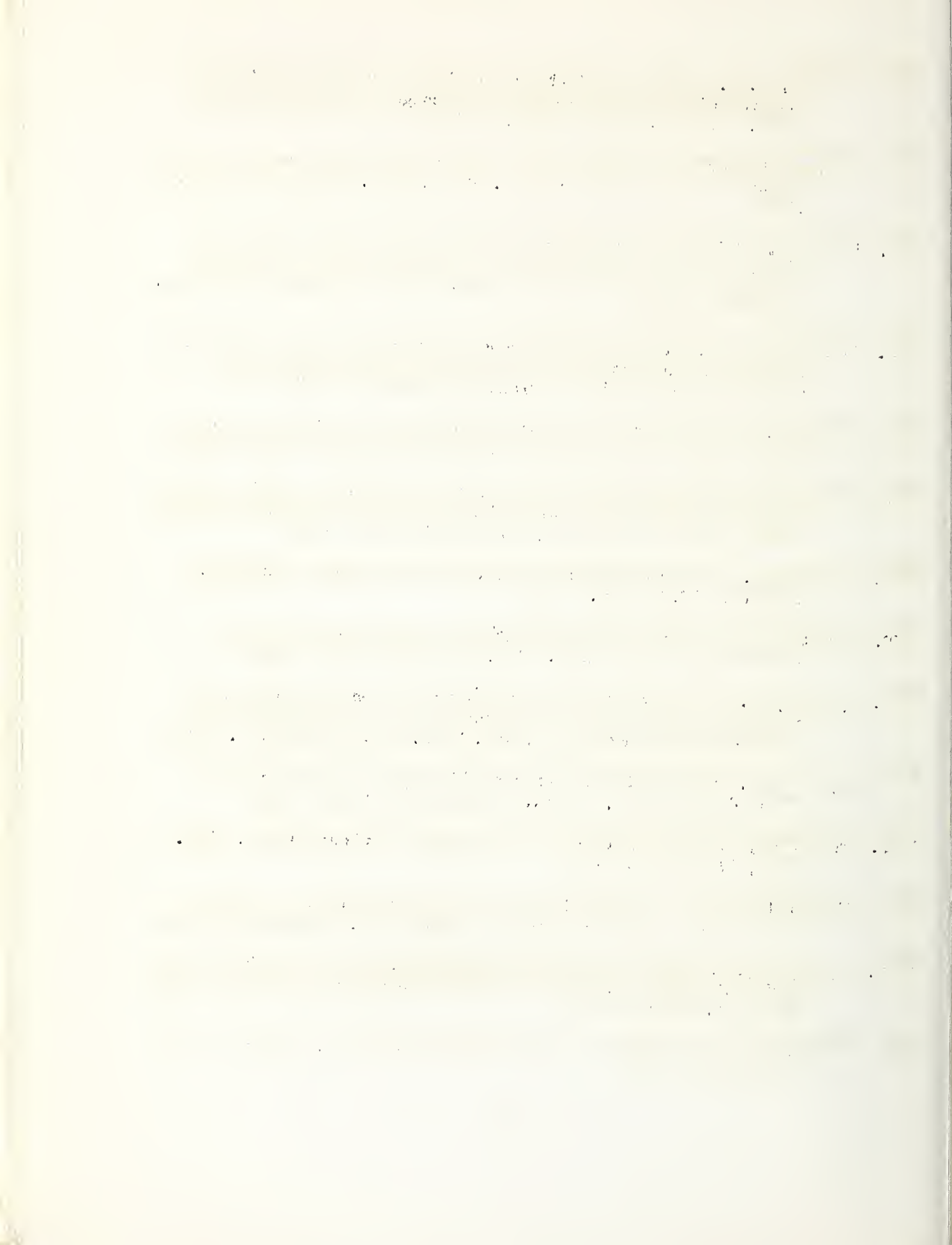
118. Virgin, H. I. Light-induced stomatal movements in wheat leaves recorded as transpiration. Experiments with the corona-hygrometer. *Physiol. Plantarum*, 9:280-303. 1956
119. ———. Light-induced stomatal transpiration of etiolated wheat leaves as related to chlorophyll content. *Physiol. Plantarum*, 9:482-493. 1956
120. ———. Stomatal transpiration of some variegated plants and of chlorophyll-deficient mutants of barley. *Physiol. Plantarum*, 10:170-186. 1957
121. ———. Chlorophyll content and transpiration of etiolated wheat leaves after pretreatment with a short light impulse followed by dark periods of varying lengths. *Physiol. Plantarum*, 10:445-453. 1957
122. von Bunning, E., and H. Sagromsky. Die bildung des spaltöffnungs-musters in der blattepidermis. *Zeit. Naturf.*, 3b:203-216. 1948
123. von Mehl, H. Über die spaltöffnungen auf den blättern der proteaceen. *Nova. Acta. Phys. Med. Acad. Cae. Leop.-Carol. Nat. Cur.*, 16(pt2): 789-804. 1833
124. von Mohl, H. Welche ursachen bewirken die erweiterung und verengung der spaltöffnungen? *Bot. Zeit.*, 14:697-704, 713-720. 1856
125. von Sachs, F. G. J. Ueber den einfluss der chemischen und physikalischen beschaffenheit des bodens auf die transpiration der pflanzen. *Landw. Vers. Stat. bd.* 1:203-240. 1859
126. Votchal, A. E. Methods for continuous estimation of the rate of transpiration in plants. *Compt. Rend. (Doklady) Acad. Sci. URSS*, 29:422-424. 1940
127. Wadsworth, H. A. Soil moisture and the sugar cane plant. *Hawaiian Planters Rec.*, 38:111-119. 1934
128. Waggoner, P. E. Temperature lapse rates over bare ground and over potato plots on peat and mineral soils. *Bul. Amer. Met. Soc.*, 31:326-329. 1950
129. ———, and R. H. Shaw. Temperature of potato and tomato leaves. *Plant Physiol.*, 27:710-724. 1952
130. Wagner, E. C. Effects of certain insecticides and inert materials upon the transpiration rate of bean plants. *Plant Physiol.*, 14:717-735. 1939

1231. Wallace, R. H., and H. H. Clum. Leaf temperatures. Amer. Jour. Bot., 25:83-97. 1938
1232. Walter, H. Die verdunstung von wasser in bewegter luft und ihre abhängigkeit von der grössse der oberfläche. Zur kritik der transpirationsversuche. Zeit. Bot., 18:1-47. 1925
1233. _____. Der wasserhaushalt der pflanze in quantitative betrachtung. Naturwiss. u Landwirtsch. H. 6, u 9. 1925 u 1926
1234. _____. Besprechung von Seybold, Die physikalische komponente der pflanzlichen transpiration. Zeit. Bot., 22: 1929
1235. _____. Die hydratur der pflanze. Fischer. Jena. 1931
1236. Warneke, F. Neue beiträge zur Kenntnis der spaltöffnungen. Jahrb. Wiss. Bot., 50:21-26. 1912
1237. Wassermann, J. Beiträge zur Kenntnis der morphologie der spaltöffnungen. Bot. Arch. 5:26-69. 1924
1238. Watson, A. N. Preliminary study on the relation between thermal emissivity and plant temperatures. Ohio Jour. Sci., 33:435-450. 1933
1239. _____. Further studies on the relation between thermal emissivity and plant temperatures. Amer. Jour. Bot., 21:605-609, 1934
1240. Weatherley, P. E. Studies in the water relations of the cotton plant. I. The field measurements of water deficits in leaves. New Phytologist, 49:81-97. 1950
1241. Weaver, J. E. The effect of certain rusts upon the transpiration of their hosts. Minn. Bot. Studies, 4:397-406. 1916
1242. _____, and J. W. Crist. Direct measurement of water loss from vegetation without disturbing the normal structure of the soil. Ecology, 5:153-170. 1924
1243. _____, and A. Mogensen. Relative transpiration of coniferous and broadleaved trees in autumn and winter. Botan. Gaz., 68:393-424. 1919
1244. Weber, F. Ueber eine einfache methode zur veranschaulichung des offnungszustandes der spaltöffnungen. Gasdiffusionmethode. Ber. Deut. Bot. Ges., 34:175-183. 1919
1245. _____. Zur physiologie thylloider verstopfungen von spaltöffnungen. Ber. Deut. Bot. Ges., 38:309-317. 1921

1246. Weber, F. Enzymatische regulation der spaltöffnungsbewegung. Naturwiss., 11:309-316. 1923
1247. _____. Zur physiologie der spaltöffnungsbewegung. Österr. Bot. Zeit., 72:43-57. 1923
1248. _____. Plasmolyseform und kernform funktionierender schliesszellen. Jahrb. Wiss. Bot., 54:687. 1925
1249. _____. Hitze-resistenz funktionierender stomatanebenzellen. Planta, 2:669-677. 1926
1250. _____. Die schliesszellen Summelreferat. Arch. Exp. Zellforsch., 3:101-113. 1926
1251. _____. Cytoplasma- und Kern- zustandsänderungen bei schliesszellen. Protoplasma, 2:305-311. 1927
1252. _____. Stomataöffnen welkender blätter. Ber. Deut. Bot. Ges., 45:408-412. 1927
1253. _____. Stomata-öffnungszustand, bestimmt mit cellophan. Ber. Deut. Bot. Ges., 45:534-535. 1927
1254. _____. Plasmolysezeit und lichtwirkung. Protoplasma, 7:256-258. 1929
1255. _____. Vakuolen- kontraktion, tropfenbildung und aggregation in stomatazellen. Protoplasma, 9:128-132. 1930
1256. _____. Permeabilität der stomatazellen. Protoplasma, 10:608-612. 1930
1257. _____. Harnstoff-permeabilität ungleich alter stomatazellen. Protoplasma, 14:75-82. 1931
1258. _____. Zur permeabilität der schliesszellen. Protoplasma, 19:452-454. 1933
1259. _____. Ein modell der stomata-bewegung. Protoplasma, 28:119-122. 1937
1260. _____. Spaltöffnungsapparatanomalien colchinieter tradescantia-blätter. Protoplasma, 37:556-565. 1943
1261. _____. Sterinoplasten fehlen den schliesszellen. Protoplasma, 44:462-463. 1955
1262. _____, and G. Kenda. Notizen über nymphaeaceen stomata. Protoplasma, 40:158-165. 1951



1263. Weiling, J. F. Ueber geschlechtsunterschiede in der assimilation und transpiration bei einigen zweihäusigen höheren pflanzen. Jahrb. Wiss. Bot., 89:157-207. 1940
1264. Weinman, H., and M. le Roux. A critical study of the torsion balance of measuring transpiration. S. Afric. Jour. Sci., 42:147-153. 1946
1265. Weiss, A. Weitere untersuchungen über die zahlen und grössenverhältnisse der spaltöffnungen mit einschluss der eigentlichen spalte derselben. Sitzgsber. Akad. Wiss. Wien, Math.-naturwiss. Kl., 1:99. 1890
1266. Welten, M. Physiologisch-ökologische nutersuchungen über den wasserhaushalt der pflanzen mit besonderer berücksichtigung der wasserabgabewiderstände. Planta, 20:45-165. 1933
1267. Wendt, O. Ueber die natur und das vorkommen der spaltöffnungen bei den pflanzen. Steinfurt, H. Winter'sche buchdruckerei. 1873
1268. Went, F. W. Plant growth under controlled conditions. III. Correlation between various physiological processes and growth in the tomato plant. Amer. Jour. Bot., 31:597-618. 1944
1269. _____. The experimental control of plant growth. Chronica Botanica, 17:294-300. 1957
1270. Wenzl, H. Die bestimmung des spaltöffnungszustandes nach dem abdruckverfahren. Jahrb. Wiss. Bot., 88:89-122. 1939
1271. _____. Das verhalten der spaltöffnungen von wasserund sumpfpflanzen. Ein beitrag zur feststellung der brauchbarkeit der zelloidinabdruckmethode. Jahrb. Wiss. Bot., 88:123-140. 1939
1272. _____. Die bestimmung des spaltöffnungszustandes mittels zelloidinabdrucken. Chron. Botanica, 6:250-251. 1941
1273. Whiteside, A. G. O. Effect of soil drought on wheat plants. Sci. Agr., 21:320-334. 1941
1274. Whitfield, C. J. Ecological aspects of transpiration. I. Pike's Peak region: climatic aspects. Botan. Gaz., 93:436-452. 1932
1275. _____. Ecological aspects of transpiration. II. Pike's Peak and Santa Barbara regions: edaphic and climatic aspects. Botan. Gaz., 94:183-196. 1932
1276. Wicks, L. M. The anatomy of amaryllidaceous leaves. Annals of Bot., 49:493-505. 1935



1277. Wiegand, K. M. Some evaporation experiments in relation to excessive transpiration. *Sci.*, 31:434. 1910
1278. _____. The relation of hairy and cutinized coverings to transpiration. *Botan. Gaz.*, 49:430-444. 1910
1279. Wiesner, J. Grundversuche ueber den einfluss der luftbewegung auf die transpiration der pflanzen. *Sitzungsb. Akad. Wiss. Wien. Abt. I.*, 96:182-214. 1838
1280. _____. Untersuchungen über den einfluss des lichtes und der strahlenden wärme auf die transpiration der pflanze. *Sitzungsb. Akad. Wiss. Wien, Abt. I.*, 84:477-531. 1876
1281. Wiggans, R. G. Variations in the osmotic concentration of the guard cells during the opening and closing of stomata. *Amer. Jour. Bot.*, 8:30-40. 1921
1282. Wilhelm, R. Über das vorkommen von spaltöffnungen auf den karpellen. *Königsberg i. Pr., Hartungsche buchdr.*, 1885
1283. Willard, C. J. The moisture content of forage at different times in the day. *Jour. Amer. Soc. Agron.*, 23:853-859. 1931
1284. Williams, R. F. An analysis of the effect of phosphorus supply on the transpiration ratio in plants. *Austral. Jour. Exp. Biol. & Med. Sci.*, 13:49-66. 1935
1285. Williams, W. T. Shock-induced stomatal movements. *Nature*, 160:364-365. 1947
1286. _____. Studies in stomatal behavior. I. Stomatal movement induced by heat-shock and transmission of such stimuli across the leaves of Pelargonium zonale. *Annals of Bot., N.S.*, 12:35-51. 1948
1287. _____. The continuity of intercellular spaces in the leaf of Pelargonium zonale, and its bearing on recent stomatal investigations. *Annals of Bot., N.S.*, 12:411-420. 1948
1288. _____. Studies in stomatal behavior. III. The sensitivity of stomata to mechanical shock. *Annals of Bot. N.S.*, 13:309-327. 1949
1289. _____. Studies in stomatal behavior. IV. The water relations of the epidermis. *Jour. Exptl. Bot.*, 1:114-131. 1950

1. The first part of the paper discusses the importance of maintaining accurate records of all transactions. It emphasizes that proper record-keeping is essential for the success of any business or organization. The author argues that without reliable records, it is impossible to make informed decisions or to track progress over time.

2. The second part of the paper focuses on the challenges of record-keeping in a digital age. While technology offers many advantages, it also introduces new risks, such as data loss and security breaches. The author suggests that organizations should implement robust backup and security protocols to mitigate these risks.

3. The third part of the paper explores the role of record-keeping in legal and regulatory compliance. It notes that many industries are subject to strict regulations that require the maintenance of detailed records. Failure to comply with these requirements can result in significant fines and legal consequences.

4. The fourth part of the paper discusses the importance of record-keeping in financial management. It explains that accurate records are necessary for calculating taxes, preparing financial statements, and monitoring cash flow. The author provides several examples of how poor record-keeping can lead to financial mismanagement.

5. The fifth part of the paper addresses the issue of record-keeping in human resources management. It highlights the need for organizations to maintain accurate records of employee performance, attendance, and compensation. This information is crucial for making fair and effective personnel decisions.

6. The sixth part of the paper discusses the importance of record-keeping in research and development. It notes that researchers must maintain detailed records of their experiments, observations, and findings to ensure the reproducibility and validity of their work. The author provides a case study of a research team that failed to maintain proper records, leading to the loss of valuable data.

7. The seventh part of the paper discusses the importance of record-keeping in project management. It explains that project managers need to maintain accurate records of project progress, budget, and resources to ensure that projects are completed on time and within budget. The author provides a checklist of key record-keeping tasks for project managers.

8. The eighth part of the paper discusses the importance of record-keeping in marketing and sales. It notes that marketers need to maintain accurate records of customer interactions, sales data, and marketing campaign results to evaluate the effectiveness of their strategies. The author provides a checklist of key record-keeping tasks for marketers.

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10. The tenth part of the paper discusses the importance of record-keeping in general management. It notes that all managers should maintain accurate records of their work to ensure accountability and transparency. The author provides a checklist of key record-keeping tasks for all managers.

1290. Williams, W. T. Studies in stomatal behavior. III. The sensitivity of stomata to mechanical shock. Part 2. True shock phenomena and their implications. Jour. Exptl. Bot., 2:86-95. 1951
1291. _____. Studies in stomatal behavior. II. The role of starch in the light response of stomata. Part 3. Quantitative relationships in Pelargonium. Jour. Exptl. Bot., 3:110-127. 1952
1292. _____. Studies in stomatal behavior. II. The role of starch in the light response of stomata. Part 4. Variation under constant conditions. Jour. Exptl. Bot., 3:424-429, 1952
1293. _____. A new theory of the mechanism of stomatal movement. Jour. Exptl. Bot., 5:343-352. 1954
1294. _____, and F. A. Amer. Transpiration from wilting leaves. Jour. Exptl. Bot., 8:1-19. 1957
1295. _____, and F. A. Barrett. The effect of external factors on stomatal starch. Physiol. Plantarum, 7:298-311. 1954
1296. _____, and M. E. Shipton. Stomatal behaviour in buffer solutions. Physiol. Plantarum, 3:479-486. 1950
1297. _____, and G. S. Spencer. Quantitative estimation of stomatal starch. Nature, 166:34-35. 1950
1298. Wilson, C. C. The porometer method for the continuous estimation of dimensions of stomates. Plant Physiol., 22:582-589. 1947
1299. _____. The effect of some environmental factors on the movements of guard cells. Plant Physiol., 23:5-37. 1948
1300. _____, W. R. Boggess, and P. J. Kramer. Diurnal fluctuations in the moisture content of some herbaceous plants. Amer. Jour. Bot., 40:97-100. 1953
1301. Wilson, H. W. Studies on the transpiration of some Australian plants with notes on the structure of their leaves. Proc. Roy. Soc. Victoria, N. S., 36:175-237. 1924
1302. Wilson, J. D. A modified form of non-absorbing valve for porous cup atmometers. Sci., 71:101-103. 1930
1303. _____, and B. E. Livingston. Lag in water absorption by plants in water culture with respect to changes in wind. Plant Physiol., 12:135-150. 1937
1304. _____, and H. A. Runnels. Bordeaux mixture as a factor increasing drought injury. Phytopath., 21:729-738. 1931

1305. Wilson, J. D., and H. A. Runnels. Some effects of Bordeaux mixture on transpiration. Ohio Agr. Expt. Sta. Bimonthly Bul., 18: 147-151. 1933
1306. _____, and _____. Influence of Bordeaux mixture and an oil emulsion on water requirement. Ohio Agr. Expt. Sta. Bul., 19:21-28. 1934
1307. _____, and _____. The relative influence of calcium and magnesium in Bordeaux mixture on the transpiration rate. Ohio Agr. Expt. Sta. Bul., 19:158-163. 1934
1308. _____, and _____. Influence of Bordeaux and oil sprays on the daily curve of transpiration. Ohio Agr. Expt. Sta. Bul., 19:179-186. 1934
1309. _____, and _____. Transpirational response of various plants to Bordeaux mixture. Ohio Agr. Expt. Sta. Bul., 19: 198-202. 1934
1310. _____, and _____. The influence of various copper-containing fungicides on the transpiration rate. Ohio Agr. Expt. Sta. Bul., 20:13-16. 1935
1311. _____, and _____. The relation of time to the effect of Bordeaux mixture on transpiration. Ohio Agr. Expt. Sta. Bul., 20:120-124. 1935
1312. _____, and _____. Influence of certain sulfate-hydrated lime mixtures on transpiration. Ohio Agr. Expt. Sta. Bul., 20: 143-146. 1935
1313. _____, and _____. Influence of various sulfur-containing fungicides on transpiration. Ohio Agr. Expt. Sta. Bul., 20: 146-148. 1935
1314. _____, and _____. Influence of residue color of Bordeaux mixture on transpiration in sun and shade. Ohio Agr. Expt. Sta. Bul., 23:129-138. 1938
1315. _____, and F. A. Welton. The use of an evaporation index in watering lawns. Ohio Agr. Expt. Sta. Bul., 20:112-119. 1935
1316. Wilson, W. J. The influence of "midnight sun" conditions on certain diurnal rhythms in Oxyria digyna. Jour. Ecol., 42:81-94. 1954
1317. Winneberger, J. H. Transpiration as a requirement for growth of land plants. Physiol. Plantarum, 11:56-61. 1953

1. The first part of the report deals with the general situation of the country and the progress of the work during the year. It is divided into two main sections: the first section deals with the general situation and the second section deals with the progress of the work.

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7. The seventh part of the report deals with the appendix of the work during the year. It is divided into two main sections: the first section deals with the appendix of the work in the field and the second section deals with the appendix of the work in the laboratory.

8. The eighth part of the report deals with the index of the work during the year. It is divided into two main sections: the first section deals with the index of the work in the field and the second section deals with the index of the work in the laboratory.

9. The ninth part of the report deals with the conclusion of the work during the year. It is divided into two main sections: the first section deals with the conclusion of the work in the field and the second section deals with the conclusion of the work in the laboratory.

10. The tenth part of the report deals with the final remarks of the work during the year. It is divided into two main sections: the first section deals with the final remarks of the work in the field and the second section deals with the final remarks of the work in the laboratory.

1318. Wisser, K. H. "Über den angeblichen chemischen transspirationschutz der pflanzen. Kiel, Buchdruckerei von K. Jansen. 1904
1319. Wood, J. G. On transpiration in the field of some plants from the arid portions of South Australia, with notes on their physiological anatomy. Trans. & Proc. Roy. Soc. So. Austral., 47: 259-278. 1923
1320. _____. The relations between distribution, structure, and transpiration of arid South Australian plants. Trans. & Proc. Roy. Soc. So. Austral., 48:226-235. 1924
1321. Woodruff, C. M., et al. Discussion of "Does transpiration decrease as the soil moisture decreases?" by F. J. Veihmeyer and A. H. Hendrickson. Trans. Amer. Geophysic. Union. 36:429-448. 1955
1322. Woods, A. F. Some recent investigations of the evaporation of water from plants. Botan. Gaz., 18:304-310. 1893
1323. _____. Noteworthy anatomical and physiological researches. Researches on transpiration and assimilation. Botan. Gaz., 21: 26-33. 1896
1324. Work, R. A., and M. R. Lewis. Moisture equivalent, field capacity and permanent wilting percentage and their ratios in heavy soils. Agr. Eng., 15:355-362. 1934
1325. Wormer, T. M., and R. Ochs. Humidité du sol, ouverture des stomates et transpiration du palmier huile et de l'arachide. Oléagineux, 14(10):571-580. 1959
1326. Wóycicki, Z. Ueber die von haberlandt entdeckten spaltöffnungsabnormitäten bei Populus lasiocarpa. Acta. Soc. Bot. Polon., 11: 323-332. 1934
1327. Wrenger, M. "Über den einfluss des windes auf die transpiration der pflanzen. Zeit. Bot., 29:257-320. 1935
1328. Wright, K. E. Transpiration and the absorption of mineral salts. Plant Physiol., 14:171-174. 1939
1329. Wulff, T. Studien über verstopfte spaltöffnungen. Oesterr. Bot. Zeit., 48:201-209, 252-258, 293-307. 1898
1330. Wylie, R. B. Principles of foliar organization shown by sun-shade leaves from ten species of deciduous dicotyledonous trees. Amer. Jour. Bot., 38:355-361. 1951

1331. Wylie, R. B. The bundle sheath extensions in leaves of dicotyledons. Amer. Jour. Bot., 39:645-651. 1952
1332. Yallouze, M. Etude expérimentale sur la relation entre la transpiration des plantes et la constante d'évaporation de Stefan. Inst. d'Egypte Bul., 31:357-375. 1949
1333. Yamaguchi, S., and A. S. Crafts. Autoradiographic method for studying absorption and translocation of herbicides using C^{14} -labeled compounds. Hilgardia 28(6):161-191. 1958
1334. Yasui, K. On the number of stomata on the leaves of some species in genus Thea. Bot. Mag. Tokyo, 40:32-35. 1926
1335. Yemm, E. W., and A. J. Willis. Stomatal movements and changes of carbohydrates in leaves of Chrysanthemum maximum. New Phytologist, 53:373-396. 1954
1336. Yin, H. C., and Y. T. Tung. Phosphorylase in guard cells. Sci., 108:87-88. 1948
1337. Yocum, L. E. The stomata and transpiration of oaks. Plant Physiol., 10:795-801. 1935
1338. Yuncker, T. G. A study of the relation of soil moisture to transpiration and photosynthesis in the corn plant. Plant World, 19: 151-161. 1916
1339. _____. Observations on the presence of stomata in some species of Cuscuta. Ind. Acad. Sci. Proc., 53:100-104. 1943
1340. Zalenske, V. Action of high temperature on the behavior of stomata. Jour. Russ. Bot. Cong., 1:62-63. 1921
1341. Zernova, L. K. Povedenie ust'its u iarovoĭ pshenitsy pri oroshenii. Trudy Vses. Inst. Zern. Khoz., 7:168-175. 1936
1342. Zhemchuzhnikov, E. A. Stomatal regulation of plant transpiration. Jour. Agr. Res. Don & North Caucasus, 1:29-39. 1922
1343. _____. Stomatal regulation of plant transpiration. Jour. Agr. Res. Don & North Caucasus, 3:41-69. 1923
1344. Ziegenspeck, A. Das vorkommen von fila in radialer anordnung in den schliesszellen. Protoplasma, 44:385-388. 1955
1345. Ziegenspeck, H. Die micellierung der turgeszenzmechanismen. I. Bot. Arch., 39:268-309, 332-372. 1938-39

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1346. Ziegenspeck, H. Die bedeutung der streichrichtung der micelle für die wachstums- und bewegungsmechanismen der pflanzen, darstellt an der spaltöffnung. *Der Biologe*, 9:360-362. 1940
1347. _____. Ein neuer weg zur erklärang der beweglichkeit der spaltöffnungen sowie des streckungswachstums mit pharmakognostischen ausblicken. *Süddeut. Apoth.-Zeit.*, 81:201-202. 1941
1348. _____. Der bau der spaltöffnungen. Dahlem bei Berlin, 1941
1349. _____. Die entwicklungsgeschichte der spaltöffnungen einiger monokotylen im lichte der micellierung und phys.-chem. beschaffenheit der wände. *Protoplasma*, 37:267-397. 1943
1350. _____. Das vorkommen von spaltöffnungen auf den fruechten der podostemonaceae. *Rev. Sudamer. de Bot.*, 8:151-158. 1950
1351. Zingeler, K. T. Ueber die spaltöffnungen der Carices. Bonn, Druck. von T.f. Carthaus. 1873
1352. Zvorykina, N. F., and M. I. Kirpichnikov. Ekologicheskoe znachenie zimney transpiratsii drevesnykh porod raznogo proiskhozhdeniya. *Trudy Leningr. Obshch. Estestv. Otd. Bot.*, 66:304-312. 1937
1353. Zwicker, R. Die transpirationsintensität der kartoffelpflanze unter besonderer berücksichtigung der beurteilung des pflanzgutwertes. *Wiss. Z. Karl-Marx Univ. Leipzig, Math.-naturwiss. Reihe*, 4: 105-151. 1954/55
1354. _____. Ein beitrag zu den physiologischen grundlagen der "Anwelkmethode." In die Anwelkmethode im dienste des landbaues. Berlin, Deutscher Verlag der Wiss., 1955

